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## General Information



# Programs and Courses 2004-2006 

Effective May 1, 2004

This University of Northern Iowa publication contains general information regarding fees, curricula, and related policies and procedures. Every effort has been made to make this information accurate as of the date of publication; however, all policies, procedures, fees and charges are subject to change at any time by appropriate action of the faculty, the university administration, or the Board of Regents, State of Iowa.

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## Summer Session, 2004-

| June | 7 | Mon., instruction begins, 7:30 a.m. |
| :---: | :---: | :---: |
| July | 5 | Mon., legal holiday observed |
| July | 30 | Fri., summer session ends, 10:00 p.m. |
| (May session - 4 weeks) |  |  |
| May | 10 | Mon., instruction begins, 7:30 a.m. |
| June | 4 | Fri., May session ends, 10:00 p.m. |
| (May/mid-June session - $\mathbf{6}$ weeks) |  |  |
| May | 10 | Mon., instruction begins, 7:30 a.m. |
| June | 18 | Fri., May/mid-June session ends, 10:00 p.m. |
| (June session - 4 weeks) |  |  |
| June | 7 | Mon., instruction begins, 7:30 a.m. |
| July | 2 | Fri., June session ends, 10:00 p.m. |
| (June/July session - 8 weeks) |  |  |
| June | 7 | Mon., instruction begins, 7:30 a.m. |
| July | 30 | Fri., eight-week session ends, 10:00 p.m |
| (mid-June/July session - 6 weeks) |  |  |
| June | 21 | Mon., instruction begins, 7:30 a.m. |
| July | 30 | Fri., mid-June/July session ends, 10:00 p.m. |
| (July session - 4 weeks) |  |  |
| July | 6 | Tues., instruction begins, 7:30 a.m. |
| July | 30 | Fri., July session ends, 10:00 p.m. |

## Fall Semester, 2004-

| Aug. | 20 | Fri., registration, 9:00 a.m.-4:00 p.m. |
| :--- | :--- | :--- |
| Aug. | 23 | Mon., instruction begins, 8:00 a.m. |
| Sept. | 6 | Mon., legal holiday (Labor Day) |
| Oct. | 15 | Fri., first half semester ends, 10:00 p.m. |
| Oct. | 18 | Mon., second half semester begins, 8:00 a.m. |
| Nov. | 23 | Tues., Thanksgiving vacation begins, 10:00 p.m. |
| Nov. | 29 | Mon., instruction resumes, 8:00 a.m. |
| Dec. | $13-17$ | Mon.-Fri., final examinations |
| Dec. | 17 | Fri., semester ends, 10:00 p.m. |
| Dec. | 18 | Sat., commencement |

## Spring Semester, 2005-

| Jan. | 7 | Fri., registration, 9:00 a.m.-4:00 p.m. <br> Jan. |
| :--- | :--- | :--- |
| Jan. | 17 | Mon., instruction begins, 8:00 a.m. |
| Mon., university holiday (Martin Luther King's birthday |  |  |
| observed) |  |  |

## Summer Session, 2005-

| June | 6 | Mon., instruction begins, 7:30 a.m. |
| :---: | :---: | :---: |
| July | 4 | Mon., legal holiday |
| July | 29 | Fri., summer sessions end, 10:00 p.m. |
| (May session - 4 weeks) |  |  |
| May | 9 | Mon., instruction begins, 7:30 a.m. |
| June | 3 | Fri., May session ends, 10:00 p.m. |
| (May/mid-June session - 6 weeks) |  |  |
| May | 9 | Mon., instruction begins, 7:30 a.m. |
| June | 17 | Fri., May/mid-June session ends, 10:00 p.m. |


| (June session - 4 weeks) |  |  |
| :---: | :---: | :---: |
| June | 6 | Mon., instruction begins, 7:30 a.m. |
| July | 1 | Fri., June session ends, 10:00 p.m. |
| (June/July session - 8 weeks) |  |  |
| June | 6 | Mon., instruction begins, 7:30 a.m. |
| July | 29 | Fri, June/July session ends, 10:00 p.m. |
| (Mid-June/July session - 6 weeks) |  |  |
| June | 20 | Mon., instruction begins, 7:30 a.m. |
| July | 29 | Fri., mid-June/July session ends, 10:00 p.m. |
| (July session - 4-weeks) |  |  |
| July | 5 | Tues., instruction begins, 7:30 a.m. |
| July | 29 | Fri,, July session ends, 10:00 p.m. |

## Fall Semester, 2005-

Aug. 19 Fri., registration, 9 a.m.-4 p.m.
Aug. 22 Mon., instruction begins, 8:00 a.m.
Sept. 5 Mon., legal holiday (Labor Day)
Oct. 14 Fri., first half semester ends, 10:00 p.m.
Oct. 17 Mon., second half semester begins, 8:00 a.m.
Nov. 22 Tues., Thanksgiving vacation begins, 10:00 p.m.
Nov. 28 Mon., instruction resumes, 8:00 a.m.
Dec. 12-16 Mon.-Fri, final examinations
Dec. 16 Fri., semester ends, 10:00 p.m.
Dec. 17 Sat., commencement

## Spring Semester, 2006-

Jan. 6 Fri., registration, 9:00 a.m.-4:00 p.m.
Jan. 9 Mon., instruction begins, 8:00 a.m.
Jan. 16 Mon., university holiday (Martin Luther King's birthday observed)
Feb. 24 Fri., first half semester ends, 10:00 p.m.
Feb. 27 Mon., second half semester begins, 8:00 a.m.
Mar. 10 Fri., spring vacation begins, 10:00 p.m.
Mar. 20 Mon., instruction resumes, 8:00 a.m.
May 1-5 Mon.-Fri., final examinations
May 5 Fri., semester ends, 10:00 p.m.
May 6 Sat., commencement

## Summer Session, 2006-

June 5 Mon., instruction begins, 7:30 a.m.
July 4 Tues., legal holiday
July 28 Fri., summer session ends, 10:00 p.m.
(May session - 4 weeks)
May 8 Mon., instruction begins, 7:30 a.m.
June 2 Fri., May session ends, 10:00 p.m.
(May/mid-June session - 6 weeks)
May 8 Mon., instruction begins, 7:30 a.m.
June 16 Fri., May/mid-June session ends, 10:00 p.m.
(June session - 4 weeks)
June 5 Mon., instruction begins, 7:30 a.m.
June 30 Fri., June session ends, 10:00 p.m.
(June/July session - 8 weeks)
June 5 . Mon., instruction begins, 7:30 a.m.
July 28 Fri., eight-week session ends, 10:00 p.m.
(mid-June/July session - 6 weeks)
June 19 Mon., instruction begins, 7:30 a.m.
July 28 Fri., mid-June/July session ends, 10:00 p.m.
(July session - 4 weeks)
July 3 Mon., instruction begins, 7:30 a.m.
July 28 Fri., July session ends, 10:00 p.m.

## General Information

This catalog is published for students and other persons who want to know more about the University of Northern Iowa. Its purpose is to communicate as objectively and completely as possible what the university is and what it does. The catalog is presented in sections to give a general view of the university as well as the detailed information required for informed decision making. Further information can be obtained on the university's homepage www. uni.edu.


## The University and lis Programs

## History

The university was established in 1876 by enactment of the Iowa General Assembly, and opened on September 6, 1876, as the Iowa State Normal School-"a school for the special instruction and training of teachers for the common schools of the state." The university offers a broad curriculum at both the undergraduate and graduate levels. Four conventional baccalaureate degrees are offered: the Bachelor of Arts, the Bachelor of Fine Arts, the Bachelor of Music, and the Bachelor of Science.

Also available is the Bachelor of Liberal Studies, an "external" degree offered in cooperation with the University of lowa and lowa State University. On the graduate level, twelve degrees are offered: the Master of Accounting, the Master of Arts, the Master of Arts in Education, the Master of Business Administration, the Master of Music, the Master of Public Policy, the Master of Science, the Master of Social Work, the sixth-year Specialist and Specialist in Education degrees, the Doctor of Education degree, and the Doctor of Industrial Technology degree.

The University of Northern lowa has grown from its 1876 original campus site of 40 acres with one building-Central Hall, which originally. housed orphaned children of Civil War soldiers-until it now embraces 57 principal buildings on a campus of 910 acres, with a fulltime faculty of approximately 650 and a total enrollment of approximately 14,000 . In addition to its physical growth, the university continues to support programs that reach into the wider community, including the UNI Center for Urban Education (UNI-CUE), which is located in the heart of the urban area of Waterloo, lowa. The internationally-known North American Review, which was established in 1815 in Boston and is the oldest periodical in the United States, is now published under the auspices of the University of Northern Iowa.

## Location

The university is located in Cedar Falls, Iowa, which has a popula-
tion of approximately 35,000 , with the Cedar Falls-Waterloo greater metropolitan area having a population of more than 110,000 . Together with the University of Iowa and Iowa State University of Science and Technology, the University of Northern Iowa is governed by the Board of Regents, State of Iowa.

## Mission

Established as the Iowa State Normal School, the institution was renamed the Iowa State Teachers College in 1909 and under this title attained a national reputation and status as a leading institution in the field of teacher education. By enactment of the Iowa General Assembly on July 5, 1961, the name of the college was changed to the State College of Iowa and degree programs were added for those not planning to teach. The change to the University of Northern Iowa was effected on July 1, 1967, following enactment by the lowa General Assembly on the recommendation of the Board of Regents, State of Iowa. Its current statement of mission was approved by the Board of Regents, State of Iowa in 2001:
"The University of Northern Iowa is a comprehensive insti-
tution committed to providing a diverse, dynamic learning environment, founded on a strong liberal arts curriculum and characterized by excellence in teaching, scholarship and service. The university focuses both on undergraduate education that emphasizes a personalized learning environment and on selected masters, doctoral and other graduate programs that provide students with specialized educational experiences. UNI programs incorporate scholarship and service to individuals, communities, and organizations throughout the state, the nation, and the world."

## Memberships and Accreditation

The University of Northern Iowa is a member of the American Association of State Colleges and Universities (AASCU), the American Association of Colleges for Teacher Education (AACTE), and the Council of Graduate Schools in the United States. The university is accredited through the doctoral degree (Doctorate of Education and Doctorate of Industrial Technology) by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools (NCA); The Higher Learning Commission, 30 North LaSalle Street, Suite 2400, Chicago, IL, 60602-2504; telephone 312-263-0456. The programs of the university are accredited by the following professional accrediting agencies: the International Association for Management Education (AACSB), the Council for Accreditation of Counseling and Related Educational Programs, the National Association of Schools of Music, the National Association of Schools of Art and Design, the Council on Social Work Education, the American Speech-Language-Hearing Association, the American Association of Family and Consumer Sciences, the National Association of Industrial Technology, and the National Recreation and Park Association/American Association for Leisure and Recreation. Programs are also approved by the Iowa State Department of Education, the National University Extension Association, and the American Chemical Society. In addition, the University Museum is accredited by the American Association of Museums.

The Master of Social Work (M.S.W.) program is accredited by the Council on Social Work Education.

The Council for Accreditation of Counseling and Related Educational Programs (CACREP), a specialized accrediting body recognized by the Council on Postsecondary Accreditation (COPA), has conferred accreditation to the following program areas in the Department of Educational Leadership, Counseling, and Postsecondary Education at the University of Northern Iowa: Mental Health Counseling (M.A.) and School Counseling (M.A.E.).

## Academic Structure

## College of Business Administration

www.cha.uni.edu

The primary objective of the College of Business Administration is to provide a high-quality professional education that will enable its graduates to meet effectively the needs of modern society. To accomplish this, the mission of the College of Business Administration is: Mission

The University of Northern Iowa's College of Business Administration will distinguish itself through excellence in its undergraduate education and selected graduate programs. Our primary focus is to provide a professional education that enables our graduates to be productive citizens in a complex society. In addition, we engage in professional training and economic development activity throughout the State of Iowa.

Our College is characterized by a learning-centered environment, considerable student-teacher interaction, a varied and relevant curriculum, state-of-the-art facilities, experiential learning, and high academic standards. This environment is achieved through a faculty and staff committed to student development, scholarly activity, and sharing of expertise through service to others.
To achieve this objective, emphasis is placed on rigorous instruction at both the undergraduate and graduate levels. All courses, with only a few exceptions, are taught by fulltime faculty members, many of whom have business experience in addition to holding advanced degrees. As a supplement to regular classroom instruction, students can enrich their educational experience by availing themselves to internships, cooperative work programs in industry and government, individual tutorials, research projects, and study abroad opportunities.

The College of Business Administration houses five departments: Accounting, Economics, Finance, Management, and Marketing. The Bachelor of Arts (B.A.) degree is offered by all five departments. Teaching licensure is offered in three areas: Business - General, Business - Office, and Business - Marketing/Management. All teaching programs are offered through the Management Department. In addition to its undergraduate programs, the college offers graduate programs leading to the Master of Business Administration (M.B.A.) degree and the Master of Accounting (MAcc) degree. Finally, the College of Business Administration serves numerous other disciplines in the university through numerous professional courses. All programs are accredited by the AACSB.

Although quality teaching is emphasized, College of Business Administration faculty members are also engaged in a variety of research and scholarly projects, both theoretical and practical. In addition, the college actively uses computers for both teaching and research. Students of the college may utilize its large computer laboratories, as well as access the university's mainframe computer.

While the provision of a first-class professional education is their major concern, faculty members and administrators in the College of Business Administration maintain a strong commitment to student preparation in the arts and sciences. Students are counseled to seek a broad educational experience, particularly at the undergraduate level, and to utilize the full resources of the university in their preparation for happy and productive lives.

The College of Business Administration is the academic unit responsible for providing degree programs in business and management. Degree programs offered by other colleges may not include more than $25 \%$ of the degree requirements in College of Business Administration course work, excluding Economics. In addition, non-business majors may not enroll in more than 30 hours from the College of Business Administration
(920:053 and 920:054 excluded from the total) and may not complete more than one College of Business Administration minor (Economics excluded).

To graduate with a major in Accounting, Business Teaching, Finance, Economics: Business Analysis, Management, Management Information Systems, or Marketing from the College of Business Administration, a student must earn at least $50 \%$ of the business credit hours required for the major from UNI. Students must also complete at least $50 \%$ of the course work required for the degree outside the College of Business Administration.

## College of Education

## www.uni.edu/coe

The College of Education includes six instructional units. Programs offered in this college lead to the degrees of Bachelor of Arts (B.A.), Master of Arts (M.A.), Master of Arts in Education (M.A.E.), Special ist in Education (Ed.S.), and Doctor of Education (Ed.D.).

The various units which comprise the college are described below:
Curriculum and instruction: Early childhood education, elementary education, middle level education, literacy education, school library media studies, instructional technology, and education of the gifted. Graduate degree programs leading to a master's degree are offered, as well as a doctoral intensive study area in curriculum and instruction. For further information, visit the Web site www. uni.edu/coe/ci.

Educational Leadership, Counseling, and Postsecondary Education: Graduate programs at the master's and Ed.D. levels in educational leadership, counseling, and postsecondary education.

Educational Psychology and Foundations: Educational psychology, human development, research and evaluation, school psychology, and social foundations of education. The department is responsible for courses required of all prospective teachers. The department has three graduate degree programs at the master's level and one graduate specialist degree program. For further information, visit the Web site www.uni.edu/coel epf.

School of Health, Physical Education, and Leisure Services: Graduate and undergraduate majors in health promotion and school health education, physical education (teaching and non-teaching), athletic training, leisure services, and youth/human service administration. The school also offers the liberal arts core Personal Wellness course in addition to minors and/or program certificates in coaching, dance, global health/ culturally competent health care, health education, health promotion, leisure services, outdoor recreation, physical education (elementary teaching), tourism, and youth services administration. The school operates several unique demonstration and outreach services including: Camp Adventure ${ }^{\text {TM }}$ Youth Services, Global Health Corps, Institute for Youth Leaders, National Program for Playground Safety, Sustainable Tourism and Environmental Program and Youth Fitness Institute. Performance groups include the International Dance Theatre (IDT), Orchesis Dance Company, and The Young Peoples Dance Theater (YPDT). Specialized laboratories include Athletic Training Laboratory, Exercise Physiology Laboratory, Biomechanics Laboratory, Psycho-Motor Behavior Laboratory, Biostatistics Laboratory, Wellness Resource Laboratory, and a Teaching Laboratory. Information on the school may be found at the Web site www.uni.edu/coe/hpels.

Special Education: Graduate majors and undergraduate minors in mild, moderate, and severe disabilities. Graduate programs emphasize Field Specialization, Special Education Consultant, and Career/ Vocational Programming and Transition. All programs emphasize fieldbased experiences and applied research.

Teaching: The Department of Teaching is responsible for the admin-
istration of its two divisions - Price Laboratory School and the Office of Student Field Experiences. Price Laboratory School is an integral part of the university's teacher education program and serves three basic functions: provides a direct-experience laboratory for all undergraduate and graduate teacher education students; operates as a center for research, experimentation, and curriculum development; and, provides leadership to the elementary and secondary schools of Iowa and the nation through publication, consultation, and a variety of in-service programs and activities. A comprehensive instructional program is offered for school pupils in nursery-kindergarten through grade 12, including programs for special education and talented/gifted students. The Office of Student Field Experiences is responsible for administering the student teaching component and other field experiences of UNI's undergraduate teacher education program. A statewide network of cooperating school centers offers a variety of student teaching sites in urban, suburban, and rural school systems. Each center is staffed with a coordinator who is a member of the UNI faculty and who is responsible for administering the student teaching program within the center and for supervising student teachers on a regular basis. Carefully-selected district-level supervisors and teachers who possess special qualities, teaching skills, and levels of competence also provide continuous classroom supervision for the student teachers.

Since its establishment in 1876 as the Iowa State Normal School, the University of Northern Iowa has maintained its affirmed commitment to the support of excellence in teacher education. This commitment was recognized by the Iowa General Assembly in 1967 when the function of the university was redefined to include as its primary responsibility the preparation of " . . . teachers and other educational personnel for schools, colleges, and universities ..."It is also acknowledged by the university in organizing and defining teacher education as an all-university function.

The College of Education, however, has a particular responsibility for teacher education. The most widespread influence on teacher education is that all students seeking licensure take professional preparation in the College of Education. For undergraduate students this professional preparation consists of a required professional education core common to all teaching majors and a culminating student teaching experience in diverse settings.

The college is involved in continuing education, working closely with school and non-school personnel throughout the state on curriculum projects, surveys, and other activities, as well as sponsoring conferences and offering classes, institutes, and workshops both on and off campus. These activities illustrate the college's commitment to service, but the college also recognizes the critical importance of such involvement for ensuring the vitality and relevance of its graduate and undergraduate programs.


Department faculty within the College of Education are engaged in writing and research activities along with their classroom instruction. The Price Laboratory School represents one area in which experimental and innovative projects are in continual operation, and these projects are open for observation and participation.

## College of Humanities and Fine Arts

www.uni.edu/chfa
The College of Humanities and Fine Arts includes seven academic departments: Art, Communication Studies, Communicative Disorders, Eng ${ }_{2}$ lish Language and Literature, Modern Languages, Philosophy and Religion, and Theatre; the School of Music; the two public radio stations, KUNI and KHKE, housed within Broadcasting Services; and the Gallagher-Bluedorn Performing Arts Center.

The College of Humanities and Fine Arts offers graduate and undergraduate degree programs. Students enrolled in majors in the college can graduate with the Bachelor of Arts (B.A.) degree in'specialized content areas in each major department in the college. The Bachelor of Fine Arts (B.F.A.) and Bachelor of Music (B.M.) are also offered in Art and Music respectively. In addition, the college serves students across the campus with an extensive set of liberal arts core, elective, and service courses.

College departments provide diverse major and minor programs at the undergraduate and graduate levels in these areas: art, communication, speech communication, journalism, journalism education, electronic media, public relations, communicative disorders, speech-language pathology (graduate level), English, teaching English to speakers of other languages (TESOL), French, German, Spanish, Portuguese, Russian, music, philosophy, religion, ethics, theatre, leadership studies, and an undergraduate minor and Master of Arts (M.A.) in women's studies.

Several departments in the college offer cooperative programs. For instance, the Department of English Language and Literature and Department of Modern Languages combine in various ways comparative literature, English, modern languages, and TESOL. The School of Music has majors in Music Education and Performance, Music History, and Conducting which lead to the Master of Music (M.M.). Program certificates are available in these departments in the College of Humanities and Fine Arts: Communication Studies B Public Speaking (undergraduate) and Corporate Communication (graduate); Modern Languages B Language Studies (French, German, Hispanic and Portuguese, Russian, and Spanish), International Commerce, Spanish for Special Purposes, and Translation (French, German, Portuguese, Russian, Spanish); Music (Artist Diploma I and II); Philosophy and Religion (Youth Development in Religious Settings).

The College of Humanities and Fine Arts also offers interdisciplinary undergraduate programs in Humanities and shares responsibility for the American Studies, Inter-American Studies, European Studies, and Russian and East European Studies majors.

Additionally, the College of Humanities and Fine Arts sponsors a wide variety of programs abroad (Eastern and Western Europe, Central and South America) and co-curricular activities for university students in all majors, for talented high school students, and for the community at large. Some examples of these activities include the music and theatre festivals, the Annual High School Art Scholarship Competition, forensics and others. These activities are in addition to the recitals and ensemble performances of individuals, ensembles, and symphonies in the School of Music, the productions staged by Theatre UNI and UNI Lyric Theatre, and the art exhibitions organized by the UNI Gallery of Art.

Administratively housed in the College of Humanities and Fine Arts are UNI's two separately programmed public radio stations. KUNI-FM serves the Cedar Falls/Waterloo, Cedar Rapids, and Iowa City areas at 90.9 on the dial. KUNI can also be heard at 98.7 in Dubuque, 94.5 in the Quad

Cities, 96.1 in Des Moines, and 91.5 in north central lowa via KUNYFM in Mason City. KUNI/KUNY broadcast quality music and public affairs features each day. KHKE-FM, at 89.5 on the dial, serves the Cedar Falls/Waterloo metro area with a jazz and classical music format. KHKE is also heard at 90.7 in Mason City, and at 1010 AM in northern Iowa and southern Minnesota, via KRNI-AM in Mason City. Students majoring in Electronic Media in the Department of Communication Studies serve as interns for the two stations.

The College of Humanities and Fine Arts prepares its graduates for lifelong learning and for a productive life in a rapidly-changing society and economic environment. Undergraduate programs in Communication Studies, English, Modern Languages, and Religion and Philosophy offer a broad range of curriculum choices to prepare students for crosscultural understanding and life in a global economy. In all of these programs students learn life-long skills in public speaking, listening, critical thinking, reflection, decision-making, and analysis. Students in English graduate with excellent skills in writing, editing, publishing, and presenting public information while graduates in foreign languages are prepared for work in government, international organizations and the private sector, serving as translators and/or interpreter or working for transnational business corporations. While some of our students pursue teaching careers in the arts or the humanities, other students, in Communicative Disorders, for example, look toward careers as professional therapists. A number of our majors will become professional performers as actors, artists, or musicians. Most UNI students take major components of the university's Liberal Arts Core in the College of Humanities and Fine Arts - for instance, courses in the humanities, in literature or writing, in philosophy and religion, in the appreciation of art, music, and theatre, in foreign languages and cultures, or in electives. For both personal and professional reasons, we believe human achievements in the liberal and fine arts are relevant and valuable studies for all the students of the university.

## College of Natural Sciences

## www.cns.uni.edu

The College of Natural Sciences houses seven instructional departments: Biology, Chemistry, Computer Science, Earth Science, Industrial Technology, Mathematics, and Physics.

The mission of the College of Natural Sciences is to provide a quality education which will prepare students to live and work in an increasingly scientific and technological world. In support of this mission, the college is committed to its emphasis on quality teaching in undergraduate liberal and technical education; well-focused graduate programs, research and technology transfer; and distinguished service to our community, state, profession, and society. The college offers exemplary programs of preservice and inservice teacher preparation in the sciences, mathematics, computer science, and industrial technology. In fulfilling this mission, the college remains committed to its historical emphasis on instructional excellence at the undergraduate and graduate levels. Such excellence is achieved by maintaining a stimulating educational environment that encourages close faculty-student interactions, scholarly research and professional service.

Majors and minors are available in all departments under both liberal arts and teaching programs leading to the Bachelor of Arts degree, with the exception of Computer Science which does not have a teaching major. The departments of Biology, Chemistry, Computer Science, Earth Science, Industrial Technology, and Physics have majors leading to the Bachelor of Science degree. In addition, students may major in science to prepare for teaching all the sciences at the secondary level. This is an interdepartmental major and is offered under the general jurisdiction and supervision of the Dean of the College.

Qualified students may pursue a dual degree program leading to a B.S. Applied Physics from the University of Northern lowa and a B.S. Engineering degree from the University of Iowa or Iowa State University. Students who intend to study engineering may complete the two-year Pre-Engineering program at UNI before transferring to an engineering school. For details of this option, please refer to the Physics section of this catalog.

Since science education does involve the cooperation of a number of departments, a science education faculty functions in providing and promoting this education. The science education faculty is comprised of individuals from various departments. A chairperson coordinates courses and programs and signs approvals.

At the graduate level, the college offers Master of Arts degree programs in biology, chemistry, industrial technology, mathematics, and science education. A major in science education may be selected for the Specialist degree. The college also offers Master of Science degree programs in biology, chemistry, computer science, environmental science, environmental technology, and environmental health. The major in biology is tailored to fit student interests and aspirations in biology and is designed for students seeking an extensive research experience; the major in chemistry is designed for students seeking an extensive research experience in a friendly environment featuring regular interaction with their faculty mentors - graduates of the program are well prepared for technical positions in industrial or government laboratories or for continued study in doctoral programs in chemistry; the major in computer science is designed to foster preparation for applied professional careers in computing sciences; the interdisciplinary programs in environmental science, environmental technology, and environmental health are designed for students with a discipline-based bachelor's degree in one of the natural sciences, technology, or engineering and prepares students for positions with environmental consulting firms, government agencies, environmental departments within large companies, and companies specializing in environmental technologies. The M.S. degrees in biology, chemistry, environmental science, environmental technology, and environmental health are also offered in a B.A./M.S. format, in which students begin work on the master's degree while still completing the undergraduate degree. The degree of Doctor of Industrial Technology is offered by the college and is designed to develop scholars in the fields of industry and education. Program focus is on the technological systems used in industry and the potential and limitations of possible future developments in technological systems and their utilization in industry.

The career opportunities for graduates in the College of Natural Sciences are numerous and diverse. Most departments offer programs for prospective teachers in elementary and secondary schools. Departmental offices are excellent sources of information about other careers.

The College of Natural Sciences is involved in a number of interdepartmental and intercollegiate projects. An annual Science, Mathematics, and Technology Symposium brings outstanding scientists to the campus to speak to selected high school students and their teachers, and the students compete for scholarships and other awards.

## College of Social and Behavioral Sciences

## http://fp.uni.edu/csbs

The College of Social and Behavioral Sciences houses seven instructional departments: Design, Family and Consumer Sciences; Geography; History; Political Science; Psychology; Social Work; and Sociology, Anthropology, and Criminology. All departments share a concern for understanding individuals, families, groups, and societies in their social, historical, and political relationships.

The college is the home of excellent professional programs and significant segments of the university's course offerings in the liberal arts. The college is committed to the principle that all students, including those in career-oriented programs, should receive the benefits of a broad, liberal education. A complementary commitment exists in a college-wide concern that graduates have reasonable career opportunities.

The Bachelor of Arts degree is awarded for studies in the liberal arts. The college also cooperates in intercollegiate/interdisciplinary programs leading to a major or minor in American Studies, Asian Studies, European Studies, Inter-American Studies, Russian and East European Studies, and Women's Studies. Certificate programs are offered in cartography and geographic information systems, gerontology, long term care, skills in social research, and substance abuse counseling.

All departments in the college participate in the preparation of teachers and most have programs which lead to a Bachelor of Arts-Teaching degree, the requisite degree for licensure in a discipline as a secondary school teacher. An interdisciplinary program in Social Science also leads to a teaching degree.

Graduate education is an important component of the mission and responsibilities of the college. The Master of Arts (M.A.) degree is offered in geography, history, psychology, sociology, and women=s studies. The Master of Public Policy (M.P.P.) and the Master of Social Work (M.S.W.) are also offered.

The primary emphasis of the university and the College of Social and Behavioral Sciences is providing high-quality, diverse educational experiences. In addition to regular classroom activities, students receive individualized instruction through field experiences, internship opportunities, individual study projects, and experiential learning. Many opportunities for both undergraduate and graduate student research exist. Several disciplines incorporate both field research and laboratory experiences in their offerings. The college offers and participates in many off-campus programs. The college has several computer-based laboratories and multimedia-equipped classrooms to enhance its educational mission.

Research and service are also integral components of the mission of the college. The college has excellent laboratory facilities, and many members of the collegiate faculty have achieved national and international recognition in their fields.

Career opportunities for graduates exist in a broad range of positions in education, public and social service, commerce, and industry. Students interested in detailed information on careers may contact departmental offices or the university's Career Services.

For additional information about the College of Social and Behavioral Sciences, contact the Dean's office at 319-273-2221 or any of the departmental offices. Information can also be obtained on the Web site at http://fp.unn.edu/csbs.

## Division of Continuing Education and Special Programs

## www.uni.edu/contined

The University of Northern Iowa has had an organized extension program since 1913. As an integral part of its total responsibility to the state, the university has a legislative charge to provide educational opportunities for Iowa residents who cannot attend courses on-campus. The division works cooperatively with the UNI staff in providing services to public schools, business and industry, and other community and professional groups through a variety of programs. Included in Continuing Education are distance education courses, off-campus credit courses, non-credit classes, conferences and workshops.

For information about off-campus credit courses, or establishment
of such courses, call or write the Office of Continuing Education and Special Programs, University of Northern Iowa, Cedar Falls, Iowa 506140223 or call 319-273-2121 or 1-800-772-1746.

## Credit Programs

Guided Independent Study: For those who find it inconvenient to attend classes on campus, opportunities to learn and earn university credit are available through the Guided Independent Study program. Over 70 courses are available via this method of delivery. Most are printbased, some are online/World-Wide-Web-based, and some are available via both mediums. Guided Independent Study courses do not follow the regular semester schedule; students can enroll at any time, work at their own pace, and have up to twelve months to complete the course. A booklet including the list of the courses and all of the program details is available by contacting the Continuing Education Credit Office located at the corner of Hudson Road and 27 ${ }^{\text {th }}$ Street, 319-273-2122 or 1-800-772-1746, or view the information at www.uni.edu/contined/cp/distance.shtml.

Off-Campus Courses and Degree Programs: Each semester UNI offers a wide variety of courses, workshops, degree programs, and certification programs in different communities throughout Iowa using on-site delivery, the Iowa Communication Network (ICN) and semester-based online/World-Wide-Web-based courses. A majority of the courses and programs are for graduate students working in $\mathrm{K}-12$ settings who are seeking advanced degrees, an additional endorsement/certification, or recertification hours. Courses and programs are also offered to business and industry employees who have specific educational needs. Those interested in off-campus courses and programs should contact the Continuing Education Credit Office at the address listed above.

## Conference and Event Services

Educational Event Management: The Continuing Education Conference and Event Services Office provides assistance in planning, budgeting, managing and evaluating conferences, seminars and institutes to enable various colleges and departments to meet continuing education needs. The Office of Conference and Events Services is the recognized University of Northern Iowa provider of Continuing Education Units (CEUs). CEUs are the national unit for the recording of noncredit education. Conference and Event Services also serves as the main point of contact for non-university groups that wish to utilize university facilities. The office is located at 8628 University Avenue or call 319-2736899 or 1-800-782-9519, fax 319-273-7338 or view the information at www. uni.edu/contined/ces

## Individual Studies Program

## www.uni.edu/contined/is

The Individual Studies Program is under the auspices of University Continuing Education and Special Programs. The following program options and course offerings are available through Individual Studies:

National Student Exchange Program
Exploratory Seminar: Self-Forming
Interdisciplinary Readings
Undergraduate Thesis
Individual Study Project
Individual Studies major (see page 102)
General Studies major (see page 101)
General Studies for Registered Nurses (see page 42-43)
National Student Exchange Program: The University of Northern Iowa is affiliated with the National Student Exchange (NSE), a consortium of state colleges and universities throughout the country that ar-
ranges for students to study on various campuses as visiting students. The purpose of the exchange is to enable students to get better acquainted with different social and educational patterns in other areas of the United States while paying UNI tuition. NSE encourages students to experience new life and learning styles, learn more about themselves and others, and broaden their educational backgrounds through specialized courses or unique programs which may not be available at UNI. Students may exchange to one of 165 colleges and universities such as California State University (Fresno), University of New Mexico, University of Idaho, University of Georgia, University of South Carolina, and University of Maine (Orono).

Students make exchange preparations through the Individual Studies Office. Sophomores and juniors with at least a 2.75 grade point average may take part in the program for either a semester or an entire year. Summer exchanges are also possible with some institutions. Financial aid and scholarship recipients should not be adversely affected by participation in the NSE program.

More information about the National Student Exchange is available at the Individual Studies Office, 1012 West 23rd Street, Cedar Falls, IA 50614-0285. Students initiate applications there under the advisement of the NSE Coordinator. Applications must be submitted in the spring semester prior to the academic year in which an exchange is planned.

## Individual Studies Courses:

Self-Forming Seminar (000:192, section 1). This course is a type of group independent study which allows students with a common interest to organize a time for study together with each member of the team often working on part of a larger problem or project. A faculty consultant must agree to evaluate the completed project at the end of the term.

Interdisciplinary Readings (000:196). This course allows the student to develop a program of readings on a topic not dealt with in the university's regular course offerings. The reading list and the number of credit hours must be approved by a faculty member specifically chosen to supervise and aid the student in her/his work.

Undergraduate Thesis (000:197). The writing of a thesis is required of all Individual Studies majors. This six-credit project may take the form of a research paper, creative work, or application of knowledge gained from an internship or work-related experience. The thesis topic must be approved by the faculty advisor. Copies of "Undergraduate Thesis Guidelines" are available in the Individual Studies Office.

Individual Study Project (000:198). Țhis course is an opportunity for research, creative work, or experience-oriented study in areas not usually covered by the university curriculum. The form of the project and the number of credit hours assigned to the project (usually 1-3) are worked out between the student and the faculty consultant selected.

Registration Procedures. All Individual Studies courses are listed in the schedule book and may be found by referring to the first page of course offerings. In addition to listing the Individual Studies course on the registration form, the filing of a prospectus is required. The prospectus is a written contract between student and faculty consultant which states what will be done, how it will be done, and what constitutes a completed project. The prospectus must be signed by the consultant and turned in during the second week of classes. Copies of "Guidelines for Independent Study" are available in the Individual Studies Office. This handout answers many questions about the policies and procedures to be followed by students enrolled in Individual Studies courses.


## Office of International Programs

http://www.uni.edu/international_programs

The Office of International Programs at the University of Northern Iowa provides service and leadership in international education to UNI students, faculty and staff who wish to research or study abroad; offers services and support to international scholars and students who are guests on our campus; and serves as a resource on international education to the university, the community, and the state. These services are administered by this office through International Student and Scholar Exchange, Study Abroad, and the Culture and Intensive English Program.

International Student and Scholar Exchange. UNI presently has exchange agreements with over 20 universities located in Europe, Asia, and South America.

Incoming Exchange Students. A designated number of students from our exchange universities study at UNI for a semester or a year. Students may also enroll in degree-granting programs.

International Scholar Exchange. In conjunction with the formal exchange agreements, the Office of International Programs acts as host to exchange scholars from these partner universities. International scholars teach and conduct research on the UNI campus for a semester or a year. In addition, UNI faculty have the opportunity to teach and conduct research worldwide on the campuses of these universities.

These student and scholar exchanges contribute to the cultural di-. versity of the UNI campus, strengthen international collaborative teaching and research efforts, and increase an exchange of information across all disciplines on a global level.

For further information on any of these programs, contact the Office of International Programs, 59 Baker Hall, University of Northern Iowa, Cedar Falls, IA 50614-0520 or call 319-273-6807.

Study Abroad. Students may earn UNI credits while studying abroad and most programs can be designed to accommodate any academic course of study. The Study Abroad Center assists students with the transfer of credits from the foreign university to UNI, with passport and visa questions, and with any other concerns that may arise during the application process. Competitive scholarships are available and financial aid may also apply toward expenses for exchange programs.

Application materials, acceptance criteria, cost, program dates, and deadlines vary by program and are available from the Study Abroad Center.

UNI Student Exchange Program. UNI undergraduate and graduate students may arrange to spend a semester or a year studying abroad at one of our official exchange universities. Each university provides a unique program. Some of these universities offer instruction in English and some instruct in the local language. Some universities provide a full curricular offering and others are more limited in the courses students may take.
lowa Regents Program. UNI is in partnership with the Iowa Regents Institutions to offer study abroad opportunities at four universities in Europe and one university in Australia. Similar to the exchange universities, some programs are based in language study, while others offer a broad selection of instruction.

For further information on any of these programs, contact the Study Abroad Center, 59 Baker Hall, University of Northern Iowa, Cedar Falls, IA 50614-0520 or call 319-273-7652.

Culture and Intensive English Program. The Culture and Intensive English Program (CIEP) provides a course of instruction for non-native speakers of English that emphasizes a practical command of spoken and written English in preparation for academic studies. CIEP offers eightweek sessions beginning in August, October, January, March, and June. Each session is preceded by an orientation session for new students. For exact dates of upcoming sessions, please contact the CIEP office.

Each session provides 20 classroom hours per week of English language study and cultural orientation. Students are taught by experienced instructors in small classes. The unique needs of each student are addressed through careful testing and placement according to ability.

Courses offered within the program include Listening Comprehension, Speaking/Pronunciation, Reading Comprehension/Vocabulary Expansion, Writing/Grammar, and TOEFL Preparation (optional). This progressive approach to language study allows students to develop and retain skills more quickly. Students successfully completing the program are awarded a Certification of Completion.

For further information on any of these programs, contact the Culture and Intensive English Program, 72 Baker Hall, University of Northern Iowa, Cedar Falls, IA 50614-0511, call 319-273-2182 or visit www.uni.edu/ciep.

## Other International Opportunities

The International Student Teaching program is administered by the Office of Student Field Experiences, Department of Teaching, in the College of Education. Students enrolled in teaching majors may apply to complete their student teaching in fully-accredited international or American schools abroad. The language of instruction is English and knowledge of a foreign language is not required. Students may apply for an international placement at the time of general application for student teaching. In some situations a four-week student teaching assignment in Iowa is necessary to fulfill state licensure standards. Financial aid is available to qualified students. For further information call the Office of Student Field Experiences 319-273-2806.

The University of Northern lowa Austrian Semester is an exchange program of one faculty member and University of Northern Iowa students with a faculty person and students from the University of Klagenfurt, Austria. Each university sends its exchange group alternate semesters. UNI students will find a number of courses in various disciplines offered in English and/or German for a full semester of credit. Open to liberal arts and sciences, business, and education students.

The Summer Institute in France (for teachers of Firench) is a fiveweek program held in Angers, France. The institute program provides for six semester hours of credit and is designed for teachers who (1) need intensive training in understanding and speaking French, and (2) would like to live among the French people and make personal contacts with French families in a French community. Participants will live with French families. For information, contact Jacques S. Dubois, Department of Modern Languages, University of Northern Iowa, Cedar Falls, IA 506140504, or visit our homepage at www. uni.edu/modlangs.

The UNI System of Summer Institutes for Spanish Teachers (UNISSIST), though primarily designed for teachers of Spanish, encourages non-teaching graduate students to participate. This program offers
the Master of Arts in Spanish with an emphasis in Language and Literature. Each summer the following institutes are available:

1. UNISSIST in Spain. Held in Santiago de Compostela there are two three-week sessions with a one-day excursion in each session. Participants will live with Spanish families and take formal classes. Areas of historical and cultural interest in northwest Spain will be visited. This institute offers up to ten hours of credit for the full seven-week period and up to six for one session. There is a four-day break between sessions. This institute will be held each summer from midJune through the first week in August.
2. UNISSIST in Cedar Falls. This institute is held in June and/or July. The number of credit hours and topics vary from summer to summer.
3. UNISSIST in Mexico. Held in Queretaro, northwest of Mexico City. There are two three-week sessions, with a one-day excursion in each session. Participants will live with local Mexican families and take formal classes. Areas of historical and cultural interest will be visited. This institute offers up to ten hours of credit for the full seven-week period and up to six for one session. There is a four-day break between sessions. This institute will be held each summer from midJune through the first week in August.
For further information, visit our homepage at www.uni.edu/ modlangs.

The Regents' Program in France is a seven-week program sponsored jointly by the three Iowa Regents' Universities. Students will spend seven weeks in Lyon, France, where they will attend courses taught by professors from the universities in Lyon. While in Lyon, students will live with French families. The program is designed primarily for undergraduates, includes weekly excursions in the Lyon area and offers up to eight semester hours of credit. For further information, visit our homepage at www. uni.edu/modlangs.

The lowa Hispanic Institute is a six- to eight-week program sponsored jointly by the University of Iowa and the University of Northern Iowa in cooperation with the University of Valladolid. The program is designed for undergraduates. Included are a week of independent travel and study at the University of Valladolid with excursions to neighboring cities. Students live with Spanish families while in Valladolid. For further information, visit our homepage at www. uni.edu/modlangs.

Social and Behavioral Sciences Foreign Study Tours are sponsored by academic units within the College of Social and Behavioral Sciences. Past and planned study tours include summer, semester-length and semester-interim programs in Europe and the Far East. Programs are conducted in cooperation with foreign universities, institutes, and business firms. Participants may enroll for either undergraduate or graduate credit.

The UNI Semester in Spain (UNISIS) is held in cooperation with the Universidad de Oviedo (UO) in Asturias in northern Spain. During the fall semester the program is shorter and more intensive. It is a twelveweek program from the first week in October through the third week in December and offers between 12 and 15 credits. During the spring semester, the program runs for 18-19 weeks from mid-January through the month of May and offers between 12-18 credits. UNISIS is designed especially for students who have had a minimum of two years of univer-sity-level Spanish or the equivalent. Upon arrival at UO, participants are tested for their skills in Spanish and placed in one of two levels. For housing and meals, the university places students with local families and there is only one student per family. During this semester, Easter Week (Semana Santa) provides participants with a nine- or ten-day break, when they may choose to travel to other parts of Spain or Europe. For further information, visit our homepage at www. uni.edu/modlangs.

The lowa Regents' Program in Venezuela offers students the opportunity to study Venezuelan literature and culture while improving their Spanish skills and experiencing life in a Latin American country.

Students live and eat all their meals with Venezuelan host families, providing the opportunity to improve their Spanish language skills and become involved with Venezuelan culture. In addition, the program offers group excursions to sites of cultural interest, as well as organized social activities. For further information, please contact University of Iowa, Office for Study Abroad, 120 International Center, Iowa City, IA 522421802, call 319-335-0353, or e-mail: study-abroad@uiowa.edu.


## Other Educational Opportunities

Army Reserve Officers' Training Corps (ROTC) Program. Army ROTC offers scholarship opportunities during college, but the real benefits begin when you graduate and are commissioned as a Second Lieutenant. ROTC opens up opportunities for positions of responsibility while teaching you valuable leadership and management skills impressive to the top employers in business and industry. ROTC also helps you grow individually, improve self-confidence, discover your capabilities, and perform to your full potential.

Community College Partnerships. The A.A. Degree from all Iowa community colleges fulfills the majority of the Liberal Arts requirements at UNI. In addition, other partnerships, also known as articulation agreements, have been developed between UNI and all Iowa community colleges for some UNI baccalaureate degree programs. These agreements show specific courses that need to be taken at each school to complete a program. If available, an articulation agreement typically results in the quickest route to graduation for a transfer student.

These partnerships are often known as $2+2$ programs, although the time to complete a degree may take more than four years depending on individual circumstances. Contact the Admissions Office at UNI to find out if an agreement is available in a specific area of interest.

In certain instances, the UNI portion of a $2+2$ program is offered at community college. For example, several B.A. degree programs are
offered on the Des Moines Area Community College campus in Carroll, Iowa for students who are place bound or career changing. These include B.A. degrees in elementary education teaching, early childhood education endorsement, and technology management/general business.

When offered on-site, the second two years are taught by UNI faculty through a mix of delivery systems including onsite classes, classes over the Iowa Communication Network, or Web-based course work. All $2+2$ programs offer the same classes as programs offered on the UNI campus.

For more information contact the UNI Admissions Office, Gilchrist 120, Cedar Falls, IA; phone 319-273-2281.

Iowa Lakeside Laboratory. Iowa Lakeside Laboratory is a field station run cooperatively by the University of Northern Iowa, the University of Iowa, Iowa State University, and Drake University through the Board of Regents, State of Iowa.

The laboratory was established in 1909 for the conservation and study of the rich flora and fauna of northwest lowa, especially those of the Iowa Great Lakes region with its numerous lakes, wetlands, and prairies. Its campus is located on approximately 140 acres of restored prairie, wetland, and gallery forest along the west shore of West Okoboji Lake. Lakeside $=s$ mission is to provide undergraduate and graduate students an opportunity to get hands-on experience working with a variety of natural and human environments through its field-oriented summer courses and to provide research facilities and support for graduate students and faculty working on research projects in northwestern Iowa.

Each summer, Iowa Lakeside Laboratory offers students a unique educational experience: small, full-immersion, field-oriented courses in the natural sciences (archaeology, art, biology, ecology, environmental science, hydrology, evolution, geology, soils, taxonomy). All courses meet all day from Monday through Friday. The majority of courses run for either 3 or 4 weeks. Enrollments in most courses are limited to 8 - 10 students. Courses are taught at the undergraduate (sophomore and junior) and the senior/graduate level. Students obtain one credit for each week ( 40 hours) in class. One- and two-week courses are also available, including courses designed especially for teachers. Weather permitting, students normally spend at least part of each day doing field work, either as part of their class work or working on individual or group projects. Because there are courses offered only alternate summers, the current Iowa Lakeside Laboratory Bulletin or the University of Northern Iowa Summer Session Schedule of Classes should be consulted for the list of courses being offered in a given summer session. The Iowa Lakeside Bulletin also contains additional information about the laboratory and about each course being offered.

Research projects by undergraduates, graduate students, and faculty can be done either on the campus or at many nearby natural areas. Undergraduate and graduate students are strongly encouraged to do independent projects at Lakeside, and graduate students are welcome to use it as a base for their thesis and dissertation research. Laboratory space and other facilities are available for long-term or short-term research projects.

Teaching and research facilities include eight laboratory buildings, a library, and a lecture hall. Living accommodations include cottages, and motel-style units. All students are encouraged to stay at Lakeside while they are taking courses to take full advantage of its educational, professional, and social life.

Financial Aid. Iowa Lakeside Laboratory Scholarships are available to both undergraduate and graduate students. All scholarships cover room and board. Information about how to apply for Iowa Lakeside Laboratory Scholarships is included in the Iowa Lakeside Bulletin. Students should also consult the Student Financial Aid Office for other scholarships, work study, and loan programs for which they are eligible.

Registration. Students can only enroll in Iowa Lakeside courses by submitting an Iowa Lakeside Registration and Scholarship Form and

Housing Form to the Iowa Lakeside Laboratory Administrative Of fice. These forms are found on the Iowa Lakeside Laboratory Web site (www. lakesidelab.org) where they can be downloaded, in the University of Northern Iowa Summer Session Bulletin, and the Iowa Lakeside Laboratory Bulletin which can be obtained from:

Iowa Lakeside Laboratory
131 Bessey Hall
Iowa State University
Ames, IA 50011-1020
Phone: 515-294-2488
Fax: 515-294-9777
E-Mail: lakeside@iastate.edu
Early registration is advisable. Because enrollment in Lakeside courses is limited, students should register before May 1 for the following summer session. Housing is very limited and students must apply for housing or indicate that they plan to live off campus at the time of registration.

The lowa Space Grant Consortium is an organization sponsored by the National Aeronautics and Space Administration (NASA) and comprised of UNI, the other Iowa Regents' universities, and Drake University. The consortium is committed to establishing a national network of universities interested in space-related fields; encouraging cooperation among industry, governments, and universities in technical career programs; organizing educational programs, and research involving scientists from different areas; and recruiting and training professionals - especially women and minorities - for careers in aerospace technology and related fields, thereby promoting a strong math and science education base from kindergarten through college. Through a program of scholarships and fellowships, the consortium provides undergraduate and graduate students with opportunities to pursue interdisciplinary research in spacerelated fields. For further information visit www.ia.spacegrant.org.

Regents' Universities Student Exchange Program. University of Northern Iowa students may take courses at either of the other two Regents' Universities (Iowa State University or University of Iowa) for UNI resident credit. Students in good standing at any of the three Regents' Universities may attend another Regents' university for a maximum of two semesters. Approval for participation and credit in the exchange program must be obtained well in advance since the department head must approve the acceptance of such credits if these are to apply to the major, and to insure adequate time for processing of the application. Detailed information and application forms for the exchange program are available from the Office of the Registrar, UNI.

Saturday and Evening Classes. A variety of university courses are scheduled for evening hours and for Saturday morning and include courses for both undergraduate and graduate students.

Students who plan to enroll for Saturday and/or evening classes ONLY may register by mail. Mail-in forms are available in the Office of the Registrar upon request. Schedules of classes are generally available in April for the fall semester and in November for the spring semester. Specific instructions for registration by mail are contained in the schedule and on the mail-in registration form.

Specific information for each semester's registration is available at the Office of the Registrar or on the Web site www.uni.edu/regist.

Washington Center Internships and Seminars. The University of Northern lowa is affiliated with The Washington Center, a nonprofit educational agency, which offers internships and seminar programs for graduate and undergraduate students in all majors. Any student may participate in two- or three-week seminars addressing topics such as leadership, the law and society, and domestic or foreign policy. Juniors, seniors, and recent graduates may go to Washington for a one-semester internship. Academic credit from UNI may be earned for the internships and seminars. Information on these programs is available from the Director of Leadership Studies in Room 125 East Bartlett Hall.


## Admission of Undergraduate Students Directly from High School

Applicants must submit a formal application for admission, together with a $\$ 30$ application fee ( $\$ 50$ for international students), and have their secondary school provide an official transcript of their academic record, including credits and grades, rank in class, and certification of graduation. Applicants must also submit scores from the American College Test (ACT) or the Scholastic Aptitude Test (SAT), or the equivalent. The Test of English as a Foreign Language (TOEFL) is required of international students whose first language is not English. Applicants may be required to submit additional information or data to support their applications.

1. Graduates of approved high schools who have the subject matter background as required and who rank in the upper one-half of their graduating class will be admitted. Applicants who are not in the upper one-half of their graduating class may, after a review of their academic and test records, and at the discretion of the admissions officers:
A. Be admitted unconditionally;
B. Be admitted conditionally; or
C. Be denied admission.
2. Applicants who are graduates of nonapproved high schools will be considered for admission in a manner similar to applicants from approved high schools, but additional emphasis will be given to scores obtained on standardized examinations.
3. Applicants who are not high school graduates, but whose classes have graduated, may be considered for admission. They will be required to submit all academic data to the extent that it exists and achieve scores on standardized examinations, such as the GED, which will demonstrate that they are adequately prepared for academic study.
4. Students with superior academic records may be admitted, on an individual basis, for part-time university study while enrolled in high school or during the summers prior to high school graduation.
5. In rare situations, exceptional students may be admitted as fulltime or part-time students before completing high school. Early admission is provided to serve persons whose academic achievement and personal and intellectual maturity clearly suggest readiness for collegiate-level study. The university will specify requirements and conditions for early admission.

# Admission of Undergraduate Students by Transfer from Other Colleges 

Applicants must submit an application form for admission, together with a $\$ 30$ application fee ( $\$ 50$ for international students), and request that each college they have attended send an official transcript of record to the Office of Admissions. Failure to provide transcripts from all colleges or universities attended may result in denial of the application or dismissal from the university. If less than 24 semester hours of graded transferable college credit will be completed prior to entry at Northern Iowa, applicants should also request that their official high school transcript and ACT or SAT scores be sent to the Office of Admissions. Other transfer applicants may be asked to provide high school academic information. The Test of English as a Foreign Language (TOEFL) is required of international students whose first language is not English.

1. Transfer students are defined as those with twenty-four (24) or more semester hours of transferable college credit. Transfer students must have or exceed the following combination of grade point and total graded transferable semester hours for admission to UNI.

| $24-41$ hours | 2.50 GPA |
| :--- | :--- |
| 42-59 hours | 2.25 GPA |
| 60 or more hours | 2.00 GPA |

Transfer applicants who have not maintained the level of academic performance given above may, after a review of their academic and test records, and at the discretion of the admissions officers:
A. Be admitted unconditionally;
B. Be admitted conditionally; or
C. Be denied admission.
2. Admission of students with fewer than twenty-four semester hours of transferable college credit will be based on high school academic and standardized test records in addition to review of the college record.
3. Transfer applicants under disciplinary suspension will not be considered for admission until information concerning the reason for the suspension has been received from the college assigning the suspension. Applicants granted admission under these circumstances will be admitted on probation.
4. Transfer applicants of colleges and universities not regionally accredited will be considered for admission on an individual basis taking into account all available academic information.

## Transfer Credit Practices

The University of Northern Iowa endorses the Joint Statement on Transfer and Award of Academic Credit approved by the American Council on Education (ACE) and the American Association of Collegiate Registrars and Admission Officers (AACRAO). The current issue of Transfer Credit Practices of Selected Educational Institutions, published by the American Association of Collegiatẹ Registrars and Admissions Officers, and publications of the American Council on Education are examples of references used by the universities in determining transfer credit. The acceptance and use of transfer credit are subject to limitations in accordance with existing educational policies of the University of Northern Iowa.

1. Students from regionally accredited colleges and universities. Credit earned at regionally accredited colleges and universities is acceptable for transfer except that credit in courses determined by the university to be of a remedial, vocational, or technical nature, or credit in courses or programs in which the institution granting the credit is not directly involved, may not be accepted, or may be accepted to a limited extent.

No more than 65 semester hours of credit earned at two-year colleges can be applied to a bachelor's degree from the University of Northern Iowa.
2. Students from colleges and universities which have candidate status. Credit earned at colleges and universities which have become candidates for accreditation by a regional association is acceptable for transfer in a manner similar to that from regionally accredited colleges and universities if the credit is applicable to the bachelor's degree at the University of Northern Iowa.

Credit earned at the junior and senior classification from an accredited two-year college which has received approval by a regional accrediting association for change to a four-year college may be accepted by the university.
3. Students from colleges and universities not regionally accredited. Credit earned at colleges and universities that are not regionally accredited is not accepted in transfer. When students are admitted
from colleges and universities not regionally accredited, the University of Northern Iowa will determine if the student may validate credit by satisfactory academic study in residence, or by examination. The university will specify the amount of transfer credit and the terms of the validation process at the time of admission.

In determining the acceptability of transfer credit from private colleges in lowa which do not have regional accreditation, the Regent Committee on Educational Relations, upon request from such institutions, evaluates the nature and standards of the academic program, faculty, student records, library, and laboratories.
4. Students from foreign colleges and universities. Transfer credit from foreign educational institutions may be granted after a determination of the type of institution involved, its recognition by the educational authorities of the foreign country, and after an evaluation of the content, level and comparability of the study to courses and programs at this university. Credit may be granted in specific courses, but is frequently assigned to general areas of study. Extensive use is made of professional journals and references which describe the educational systems and programs of individual countries.


## High School Preparation for Undergraduate Admission

Students entering the university must have completed the following set of high school courses (units) or their equivalents. These high school units apply to entering freshmen and transfer students with less than 24 semester hours of transferable college credit.

Subject Requirement Explanation
English $\quad 4$ years $\quad$ Must include 1 year of composition. May include 1 year of speech, communications and/or journalism.
Mathematics 3 years
Social Studies 3 years

Science 3 years

Electives 2 years

Must include equivalent of algebra, geometry, and advanced algebra. Anthropology, economics, geography, government, history, psychology, and/or sociology are acceptable. General science, biology, chemistry, earth science and/or physics are acceptable. Laboratory experience is highly recommended.
Additional courses from subject areas identified above are acceptable. May include foreign language* and/or fine arts.
*Two years of one foreign language in high school with a C- or above in the last term meet the university graduation requirement. The university highly recommends that students fulfill this requirement while in high school.

Students who graduated from high school before 1988 and transfer students who graduated from high school in 1988, and after, who have completed 24 or more semester hours of transferable college credit will be considered exempt from the high school course requirements for admission.

## Admission Requirements for Graduate Students

All applicants for graduate study must submit an application form specifying their choice of degree program with a $\$ 30$ application fee or $\$ 50$ fee for international students and request all necessary official transcripts be sent to the Office of the Registrar (see pages 138-139). Failure to provide official transcripts from all required colleges and universities can result in a denial or rescinding of admission.

Admission to graduate study does not guarantee admission to an advanced degree program. Responsibility for determining eligibility for admission to graduate degree programs rests primarily with the academic departments. The academic departments are responsible for receiving degree status admission applications and for determination of admissibility.

A graduate of a college or university accredited by the North Central Association of Colleges and Secondary Schools or a corresponding regional agency will be granted admission to graduate study if her/his application for admission has been approved.

A graduate of a college or university that is not accredited may be granted provisional admission at the discretion of the Dean of the Graduate College.

For further details on graduate admission eligibility and approvals, see pages 138-139.

Note: Students with a recognized baccalaureate degree who are seeking a second baccalaureate degree, teaching endorsements or approvals through UNI recommendation, and/or miscellaneous undergraduate course work may be admitted through the undergraduate Office of Admissions. These students pay undergraduate fees and may not apply credit earned toward a graduate program.

## Classification of Residents and Nonresidents for Admission, Tuition, and Fee Purposes

## I. General

A. A person enrolling at one of the three state universities shall be classified as a resident or nonresident for admission, tuition, and fee purposes by the Registrar or someone designated by the Registrar. The decision shall be based upon information furnished by the student and other relevant information.
B. In determining resident or nonresident classification, the issue is essentially one of why the person is in the state of Iowa. If the person is in the state primarily for educational purposes, that person will be considered a nonresident. For example, it may be possible that an individual could qualify as a resident of Iowa for such purposes as voting, or holding an Iowa driver's license, and not meet the residency requirements as established by the

Board of Regents, State of Iowa, for admission, tuition, and fee purposes.
C. The Registrar, or designated person, is authorized to require such written documents, affidavits, verifications, or other evidence deemed necessary to determine why a student is in Iowa. The burden of establishing that a student is in Iowa for other than educational purposes is upon the student.
A student may be required to file any or all of the following:

1. A statement from the student describing employment and expected sources of support;
2. A statement from the student's employer;
3. A statement from the student's parents verifying nonsupport and the fact that the student was not listed as a dependent on tax returns for the past year and will not be so listed in future years;
4. Supporting statements from persons who might be familiar with the family situation;
5. Iowa state income tax return.
D. Change of classification from nonresident to resident will not be made retroactive beyond the term in which application for resident classification is made.
E. A student who gives incorrect or misleading information to evade payment of nonresident fees shall be subject to serious disciplinary action and must also pay the nonresident fees for each term previously attended.
F. Review Committee.

These regulations shall be administered by the Registrar or someone designated by the Registrar. The decision of the Registrar or designated person may be appealed to a University Review Committee. The finding of the Review Committee may be appealed to the Board of Regents, State of lowa.

## II. Guidelines

The following guidelines are used in determining the resident classification of a student for admission, tuition, and fee purposes.
A. A financially-dependent student whose parents move from Iowa after the student is enrolled remains a resident provided the student maintains continuous enrollment. A financially-dependent student whose parents move from Iowa during the senior year of high school will be considered a resident provided the student has not established domicile in another state.
B. In deciding why a person is in the state of Iowa, the person's domicile will be considered. A person who comes to Iowa from another state and enrolls in any institution of post-secondary education for a full program or substantially a full program
shall be presumed to have come to Iowa primarily for educational reasons rather than to establish a domicile in Iowa.
C. A student who was a former resident of Iowa may continue to be considered a resident provided absence from the state was for a period of less than twelve months and provided domicile is reestablished. If the absence from the state is for a period exceeding twelve months, a student may be considered a resident if evidence can be presented showing that the student has longterm ties to lowa and reestablishes an Iowa domicile.

A person or the dependent of a person whose domicile is permanently established in Iowa, who has been classified as a resident for admission, tuition, and fee purposes, may continue to be classified as a resident so long as such domicile is maintained, even though circumstances may require extended absence of the person from the state. It is required that a person who claims lowa domicile while living in another state or country will provide proof of the continual lowa domicile such as evidence that the person:

1. Has not acquired a domicile in another state,
2. Has maintained a continuous voting record in lowa, and
3. Has filed regular lowa resident income tax returns during absence from the state.
D. A student who moves to lowa may be eligible for resident classification at the next registration following twelve consecutive months in the state provided the student is not enrolled as more than a half-time student (six credits for an undergraduate or professional student, five credits for a graduate student) in any academic year term, is not enrolled for more than four credits in a summer term for any classification, and provides sufficient evidence of the establishment of an lowa domicile.
E. A student who has been a continuous student and whose parents move to lowa may become a resident at the beginning of the next term provided the student is dependent upon the parents for a majority of financial assistance.
F. A person who is moved into the state as the result of military or civil orders from the government for other than educational purposes, or the dependent of such a person, is entitled to resident status. However, if the arrival of the person under orders is subsequent to the beginning of the term in which the student is first enrolled, nonresident fees will be charged in all cases until the beginning of the next term in which the student is enrolled. Legislation, effective July 1, 1977, requires that military personnel who claim residency in lowa (home of record) will be required to file Iowa resident income tax returns.

G. A person who has been certified as a refugee or granted asylum by the appropriate agency of the United States who enrolls as a student at a university governed by the Board of Regents, State of lowa, may be accorded immediate resident status for admission, tuition, and fee purposes where the person:
4. Comes directly to the state of Iowa from a refugee facility or port of debarkation, or
5. Comes to the state of Iowa within a reasonable time and has not established domicile in another state.
Any refugee or individual granted asylum not meeting these standards will be presumed to be a nonresident for admission, tuition, and fee purposes and thus subject to the usual method of proof of establishment of lowa residency.
H. An alien who has immigrant status establishes lowa residency in the same manner as a United States citizen.

## III. Facts

A. The following circumstances, although not necessarily conclusive, have probative value in support of a claim for resident classification:

1. Reside in lowa for tiwelve consecutive months, and be primarily engaged in activities other than those of a full-time student, immediately prior to the beginning of the term for which resident classification is sought.
2. Reliance upon lowa resources for financial support.
3. Domicile in lowa of persons legally responsible for the student.
4. Former domicile in the state and maintenance of significant connections therein while absent.
5. Acceptance of án offer of permanent employment in Iowa.
6. Other facts indicating the student's domicile will be considered by the universities in classifying the student.
B. The following circumstances, standing alone, do not constitute sufficient evidence of domicile to effect classification of a student as a resident under these regulations:
7. Voting or registration for voting.
8. Employment in any position normally filled by a student.
9. The lease of living quarters.
10. Admission to a licensed practicing profession in Iowa.
11. Automobile registration.
12. Public records, for example, birth and marriage records, Iowa driver's license.
13. Continuous presence in lowa during periods when not enrolled in school.
14. Ownership of property in Iowa, or the payment of Iowa taxes.


## Enrollment and Registration Procedures



## Enrollment

Organization by Semesters. The university operates on the semester basis. This means that the work during the academic year is divided into two semesters of approximately sixteen weeks each ( 15 weeks of instruction and 1 week of final exams). One semester hour of credit is based on one hour of work per week for fifteen weeks.

Summer Sessions. The 2004 and 2005 summer sessions will include a full eight-week session, two six-week sessions, three four-week sessions, and a number of special sessions and workshops of varying lengths. For information, write to the Office of the Registrar, Gilchrist 243, Cedar Falls, IA 50614-0006 or visit the Web site at www.uniedu/regist.

University Office Hours. The university's principle administrative offices are open from 8:00 a.m.-12:00 noon and 1:00-5:00 p.m. Monday through Friday during the academic year (from the beginning of the fall semester to spring commencement). During the remainder of the year (the summer months) the offices are open from 7:30 a.m.- 4:30 p.m. Monday through Friday. Specific dates are determined yearly.

Students and their parents are invited to come to the campus to make arrangements for university enrollment. Such visits should be made on Mondays through Fridays to maximize exposure to the university and its services.

All university offices are also closed for the following holidays:

| New Year's Day <br> Martin Luther King's <br> Birthday | 2004 <br> Thurs., Jan. 1 | 2005 <br> Fri., Dec. 31, 2004 |
| :--- | :--- | :--- |
| Memorial Day | Mon., Jan. 19 | Mon., Jan. 17 |
| Independence Day | Mon., May 31 | Mon., May 30 |
| Labor Day | Mon., July 5 | Mon., July 4 |
| Thanksgiving | Mon., Sept. 6 | Mon., Sept. 5 |
|  | Thurs., Nov. 25 | Thurs., Nov. 24 |
| Christmas | Fri., Nov. 26 | Fri., Nov. 25 |
|  | Fri, Dec. 24 | Mon., Dec. 26 |
|  | Mon., Dec. 27 | Tues., Dec. 27 |

The university's academic calendar and holidays are subject to approval by the Board of Regents, State of lowa.

## Registration Procedures

New students, both graduate and undergraduate, cannot register for classes until all requirements for admission to the university are met.

After admission requirements are met, new graduate students will register in accordance with the procedures set out in the Schedule of Classes.

After admission requirements are met, new undergraduate students will receive their registration materials in connection with the orientation program provided for such students. Further instruction for completing registration will be given during the orientation program.

Former students returning to the university after an absence of a semester or more must file a notice of intent to register for the semester or summer session in which they plan to enroll. The notice of intent to register is filed with the Office of the Registrar. Specific information for each semester's registration procedures is given in the front section of the Schedule of Classes for that particular semester; this schedule is available at the Office of the Registrar. Students can also access their registration information via the Web at www.uni.edu/regist/reginfo.htm or http: //myuniverse. uni.edu.

Veterans. The university cooperates with the Veterans Administration providing for the education of veterans under the provision of federal laws. Dependents of veterans or of those persons who may be classified as prisoners of war or missing in action in Vietnam may also receive financial assistance from the Veterans Administration. The Office of the Registrar will assist students eligible under any of these laws and provide the required reports. For additional information, contact the Office of the Registrar, University of Northern Iowa, Gilchrist 243, Cedar Falls, IA 50614-0006.


## Student Costs

The overall costs for undergraduate students who are residents of Iowa is approximately $\$ 14,516.00$ for the academic year.

| Tuition | $\$ 4,702.00$ |
| :--- | ---: |
| Fees | $\$ 685.00$ |
| Board and Room | $\$ 5,273.00$ |
| Books, supplies, and incidentals | $\$ 3,855.00$ |

Non-resident students are charged an additional $\$ 7318$ tuition.
Students are required to provide their own books. Ordinarily the cost for these books will be $\$ 819$ per academic year. Students may buy their texts from any source. A student organization operates a book exchange at the beginning of each semester.

## Schedule of Fees

The schedule of fees set forth below applies to all university students as indicated. There is no non-resident differential fee for non-resident students taking less than five semester hours during a regular semester of the academic year or summer session.

All fees and all policies governing the refund of fees are subject to change by the Board of Regents, State of lowa.

## Effective May 1, 2004 lowa Residents Non-Residents

## I. Tuition

A. Fall Semester, Spring Semester, or Summer Session Undergraduate Credit Hours

| 1 | $\$ 392$ | $\$ 392$ |
| :---: | ---: | ---: |
| 2 | 392 | 392 |
| 3 | 588 | 588 |
| 4 | 784 | 784 |
| $5^{*}$ | 980 | 2505 |
| 6 | 1176 | 3006 |
| 7 | 1372 | 3507 |
| 8 | 1568 | 4008 |
| 9 | 1764 | 4509 |
| 10 | 1960 | 5010 |
| 11 | 2156 | 5511 |
| 12 or more | 2351 | 6010 |
| Graduate Credit Hours |  |  |
| 1 | $\$ 610$ | $\$ 610$ |
| 2 | 610 | 610 |
| 3 | 915 | 915 |
| 4 | 1220 | 1220 |
| $5^{*}$ | 1525 | 3615 |
| 6 | 1830 | 4338 |
| 7 | 2135 | 5061 |
| 8 | 2440 | 5784 |
| 9 or more | 2744 | 6506 |

B. Workshops (xcc:033, 133, 233) are paid on a credit-hour basis, without regard to resident status, and are assessed separately from the above schedule.

| Undergraduate | $\$ 196$ | $\$ 196$ |
| :--- | ---: | ---: |
| Graduate | 305 | 305 |

*A mandatory health fee of $\$ 62.00$ will be added to registrations of five or more hours.

A mandatory computer fee will be added to registrations as follows:

## Undergraduate

| 12 or more hours | $\$ 82.50$ | 9 or more hours | $\$ 82.50$ |
| :--- | ---: | :--- | ---: |
| $9-11$ hours | 61.75 | $7-8$ hours | 61.75 |
| $6-8$ hours | 41.25 | $5-6$ hours | 41.25 |
| $1-5$ hours | 20.75 | $1-4$ hours | 20.75 |

A mandatory student services fee will be added to registrations as follows:

## Undergraduate

| 12 or more hours | $\$ 95.00$ | 9 or more hours | $\$ 95.00$ |
| :--- | ---: | :--- | ---: |
| $9-11$ hours | 71.25 | $7-8$ hours | 71.25 |
| $6-8$ hours | 47.50 | $5-6$ hours | 47.50 |
| $1-5$ hours | 23.75 | $1-4$ hours | 23.75 |

A mandatory health facility fee will be added to registrations as follows:
Undergraduate
$5-12$ or more hours $\quad \$ 13.00 \quad 5-9$ or more hours $\$ 13.00$
$1-4$ hours $\quad 6.50 \quad 1-4$ hours $\quad 6.50$
A mandatory building fee will be added to registrations as follows:

Undergraduate
5-12 or more hours
1-4 hours
$\$ 90.00$
45.00

## Graduate

$5-9$ or more hours $\$ 90.00$
1-4 hours
45.00

## II. Residence Hall Fees

Specific information on fees may be obtained from Department of Residence, Redeker Center.

## III. Other Fees

A. Application for admission to the university ..................... $\$ 30$
B. Application for admission of international students .......... 50
C. Applied music (in addition to tuition)

Private lessons - $1 / 2$ hour per week ( 1 credit hour) ............ 90
Private lessons - 1 hour per week (2 credit hours) ............ 150
Group voice, group piano (groups of 4 or more).....o.a....o.ose 38
Instrument rental (per instrument) .................................... 25
D. Change of registration, per form (after 7 class days).....o.o.o. 10
E. Continuous graduate student ................................................................
F. Correspondence study (specified as "Guided Independent Study" at UNI), per credit hour.153
(plus an enrollment fee of $\$ 13.00$ per course)
G. Credit by examination, per course .....os.................................. 50
H. Deferred payment fee, per semester ...................................... 20

J. Duplicate copy of class schedule ..............................................................
K. Extension course, per credit hour



M. Late registration.............................o.......................................................
N. Non-credit developmental courses, per credit hour......... 392
O. Orientation services

Administrative fee - freshmen .................................................. 90
Administrative fee - transfer ............................................... 90

Q. Returned Check Fee, per check......................................................
R. Transcript of academic record

Each copy .............................................................................................. 10
Immediate service (per copy) ....o.................................................... 12
FAX service per copy ...............o.o.o...o...............................o...... 7
S. uCard replacement ..............................................................................
T. Workshop/telecourse

Undergraduate, per credit hour.......................................... 196
Graduate, per credit hour96

Fee Payment and Billing. The university offers students the option of paying their tuition fees and residence hall room and board contracts in one payment at the time of billing or in three monthly installments. Each university electronic e-bill will give the student the option of paying the "account balance" at the time of billing or the "minimum amount due" (installment amount). A $\$ 20$ administrative charge will be assessed one time per semester for the installment payment plan. Normally, three installment payments can be made for a regular semester depending on the date of registration.

Other fees for which students will be billed are parking permits, health center fees, athletic tickets, laboratory fees, university apartment rent, and miscellaneous fees which may occur. These are not included in the installment option.

The university does not mail paper bills to enrolled students or their parents. Instead, electronic e-bills are available through MyUNIverse at http://myuniverse.uniedu. Monthly e-bills are generated the $10^{\text {th }}$ of ev ery month and'payments are due approximately the $5^{\text {w }}$ of the following month. For billing dates and payment due dates, refer to the Schedule of Classes for the appropriate session or visit the Web site at www.uni.edu/ regist. It is the student's responsibility to check their e-bill account at least monthly and make required payments by the due date.

Note: Students electing to use the installment payment program are reminded that they will be placed under "Restricted Enrollment" status if payments are not made to the University Office of Business Operations by the date specified on the billing. A $\$ 25$ restricted enrollment fee will be assessed for each billing which remains past due. Students placed on Restricted Enrollment status will not be permitted to pre-register or to receive academic records until this status has been lifted.

See page 56 for information on withdrawal refunds and fee reduction.

## Financial Aid Office

The University of Northern Iowa, through the Financial Aid Office, administers a comprehensive program of financial assistance for students. The office offers all federal student aid programs as well as a variety of scholarship assistance.

The Financial Aid/Student Employment Center is located:
Financial Aid Office
255 Gilchrist Hall
Cedar Falls, IA 50614-0024
Telephone: 319-273-2700 or 1-800-772-2736
Fax: 319-273-6950
Web site: www.uni.edu/finaid
Student Employment Center
255 Gilchrist Hall, Cedar Falls, IA 50614-0024
Telephone: 319-273-6394
Office Hours 8:00 a.m. - 5:00 p.m.
Summer Hours 7:30 a.m. - 4:30 p.m.

## Financial Aid Information On the Web

Financial Aid Award Notification, Online Job Board, scholarship directory, general information and information needed by the Financial Aid Office to continue processing a student's aid is posted on MyUNIverse at http://myUNIverse.uni.edu. For new students, information needed by the Financial Aid Office is mailed to the student as well as being available on MyUNIverse. For returning UNI students, information is only available on MyUNIverse, unless the student contacts the Financial Aid Office and requests the information be mailed. An e-mail notification is sent to the student's UNI e-mail address when information is needed, and the student is responsible for checking MyUNIverse for details.

## Federal Student Aid Programs

Students must complete a Free Application for Federal Student Aid (FAFSA) form to have eligibility determined for a Pell Grant, Supplemental Educational Opportunity Grant (SEOG), Perkins Loan, Work Study, or Direct Stafford Loans (subsidized and unsubsidized). Students need to apply for financial aid each year. Applying for a Parent Loan for Undergraduate Students (PLUS) does not require the completion of a FAFSA, however, it is recommended.

Qualifying for student aid requires enrollment of at least halftime, and admission in a degree or certificate program. Financial aid is not available for correspondence (specified as "Guided Independent Study" at UNI), Camp Adventure, or audited courses.

Pell Grants. These awards help undergraduates pay for their education while working on their first bachelor's degree. Amounts range up to $\$ 4,050$, depending on need and enrollment status. A Pell Grant does not have to be repaid.

Supplemental Educational Opportunity Grants (SEOG). This program targets students receiving a Pell Grant and having exceptional financial need. Awards range up to $\$ 1,000$ per academic year. A SEOG does not have to be repaid.

Perkins Loan. Perkins Loans awards are based on need and range from $\$ 200$ to $\$ 3,000$. Interest begins accruing 9 months after the borrower is no longer at least a half-time student. Repayment to the university is made in monthly installments. Deferments are possible if a borrower returns to college at least half-time.

Federal, State, and UNI Work Study. These are programs for students with financial need who desire employment to help pay for educational expenses. Both undergraduate and graduate students can qualify for work study. The minimum pay rate is $\$ 5.60$ per hour.

Direct Stafford Loan (subsidized and unsubsidized). The Subsidized Stafford Loan is based on financial eligibility. The Unsubsidized Stafford Loan is available to all degree-seeking students. Freshman students may borrow up to $\$ 2,625$ for an academic year. Sophomore students may borrow up to $\$ 3,500$ for an academic year. Junior or senior students may borrow up to $\$ 5,500$ for an academic year. The total amount an undergraduate may have outstanding cannot exceed $\$ 23,000$. Graduate students can borrow up to their cost of attendance as determined by UNI or $\$ 18,500$, whichever is less, per academic year. The total amount any one student may borrow for a combined undergraduate and graduate program may not exceed $\$ 138,500$. Repayment begins six months after the student ceases to be enrolled at least half-time. Interest rate is variable and will not exceed $8.25 \%$.

Parent Loan for Undergraduate Student (PLUS). A parent of a dependent student may be eligible for an amount up to the cost of education less any other Direct Stafford Loan, financial aid, or scholarship money available to the student to use for educational expenses. The interest is variable but will not exceed $9 \%$. Repayment begins within 60 days following the last disbursement of the loan.

## Standards of Satisfactory Progress for Financial Aid Eligibility

Standards of Satisfactory Progress is a two-part federal regulation to ensure that students receiving aid are:

1. making satisfactory progress toward a degree, and
2. completing a degree within a specific time period, regardless if financial aid was received in the past.
The aid programs that are affected include, but are not limited to: Pell Grant, Perkins Loan, Supplemental Educational Opportunity Grant, Federal, State, and UNI Work Study, institutional grants, state grants, Direct Stafford Loan (subsidized and unsubsidized), Direct Parent Loan for Undergraduate Students, and certain education bank/private lender loans.

## 1. Making Progress Toward a Degree Each Semester

Only Fall and Spring semesters are evaluated. (Summer is not evaluated.)

## Undergraduate/Graduate/Doctorate

Students who enroll full-time ( 12 credit hours or more per semester) are required to complete a minimum of 9 credit hours per semester.

Students who enroll 6-11 credit hours per semester are required to complete a minimum of 6 credit hours per semester.

Students who enroll $1-5$ credit hours per semester are required to complete all the hours enrolled that semester.

## 2. Completing A Degree Within a Specific Time Frame For Financial Aid Eligibility

The total academic record (Summer included) is reviewed, regardless if aid was received or credit was earned at UNI.

First BA students are required to complete a degree within 12 fulltime semesters, 18 three-quarter time semesters, or 24 half-time semesters or upon completing 160 credit hours.

Second BA/Teaching Certification/1st MA/1st Doctorate students are required to complete a degree within 6 semesters, 9 three-quartertime semesters, or 12 half-time semesters, or upon completing 60 credit hours. Please inform the Financial Aid Office if your program requires more than 60 credit hours.

Other degrees, such as 2nd 'BA, 2nd MA, 2nd Doctorate after beginning a 1st MA, must be funded by the student without financial aid. (Exceptions may be allowed through the Appeal Process as indicated below.)

## 3. Other Guidelines

Grades. Grades of A, B, C, D, Cr, P, or X are counted as meeting the required hours. Failed classes, audited classes, incomplete grades, and withdrawn classes are not counted toward completed hours for Satisfactory Progress.

Financial Aid Academic Progress Warning. The first semester in which a student does not complete Satisfactory Academic Progress, the student will receive a warning notification, but will continue to be eligible for financial aid. Also, a student who is nearing the allotted timeframe to complete a degree will be notified and informed of the number of financial aid semesters remaining.

Not Eligible Status for Financial Aid. Once a student has received a warning, any subsequent Fall or Spring semester in which the student does not maintain Satisfactory Progress will result in the student being notified about the loss of financial aid eligibility. A student who has reached the allotted timeframe to complete a degree will also lose financial aid eligibility. Please contact the Financial Aid Office if the graduate program requires more than 60 credit hours.

Appeal Process and Deadline. An appeal process is in place for those experiencing extenuating circumstances that affected their ability to make satisfactory academic progress. Appeal forms may be obtained from the Financial Aid Office. Appeals must be submitted no later than the end of the first week of classes following the suspended semester or within 15 calendar days of the date on the academic progress letter, whichever is later. (If suspension occurs at the end of the spring semester, students are encouraged to appeal during the summer period.) A written outline of required course work per semester until graduation signed and dated by the student and the advisor is required.

Reinstatement of Financial Aid. Students approved to receive aid again will be expected to adhere to the Satisfactory Progress Policy outlined above and any conditions listed on the Appeal Approval Contract.

Financial Aid Adjustment. If financial aid has already been awarded and an appeal is not completed or approved, the financial aid funds will be canceled 30 days after the start of the suspended semester. Reinstatement of the financial aid is contingent upon the availability of the funds at the time the appeal is approved.

Grant Adjustment. Grants are need-based aid. The Pell Grant Program is for students working on their furst B.A. degree. Due to federal regulation and university policy, the actual amount of grant that you receive is based on the number of credit/hours for which you are enrolled.

This means that if a grant has already been disbursed to you and you add or drop classes during the first 3 weeks of the semester, your grant will be adjusted. After the third week of classes grants do NOT adjust. If you have any questions about how your grant may be affected by adding or dropping a class, please contact the Financial Aid Office, 255 Gilchrist.

Correspondence (specified as "Guided Independent Study" at UNI), Camp Adventure, Audited Courses. Financial aid is not available for correspondence (specified as "Guided Independent Study" at UNI), Camp Adventure, or audited courses. If you have any questions regarding this policy, please contact the Financial Aid Office at 319-273-2700.

Student Loans. Students must complete a Free Application for Federal Student Aid (FAFSA), then return a signed Promissory Note to the Financial Aid Office. You will sign only one promissory note that will be used for all of your loans at UNI. By using the Master Promissory Note (MPN), you may not need to sign and submit a separate promissory note for each new loan. A student who borrows under the Direct Loan Program at UNI will be able to borrow under this one MPN up to ten years. If you borrowed a Direct Loan at UNI in the prior academic year, you do not need to complete another promissory note. Students must also be degree-seeking and enrolled at least half-time ( 6 hours for undergraduate, 5 hours for graduate) before loan funds can be released. All loan proceeds are credited directly to your university bill.

How Dropping Credit Hours or Withdrawing from UNI Affects Financial Aid. If you drop credit hours or withdraw from UNI, your cost of attendance and financial aid may be revised to reflect any tuition adjustment. You may have to repay a portion or all of your financial aid as required by law or by applicable fund donor. The exact amount of repayment will vary depending on when the credits are dropped or when the withdrawal occurs. In addition, you may become ineligible for future financial aid due to failure to meet the Financial Aid Academic Progress Requirements.

Federal regulations require students who withdraw before over $60 \%$ of the semester has passed to return unearned federal aid in a proportion equal to the time not in attendance. For example, if a student completes $30 \%$ of the semester, then $30 \%$ of the federal aid received may be retained and the other $70 \%$ of the federal aid received must be returned. If a student withdraws after the $60 \%$ point in time of the semester, then all aid received may be retained. Loans must be paid back according to the loan agreement. Institutional and state aid are returned in percentages equal to the institution's tuition and fees refund policy (see page 56). For example, if a student receives $25 \%$ tuition refund, then an equal percentage of $25 \%$ will be returned to all state and institutional aid programs. Contact the Financial Aid Office for more information.

Funds will be returned to the financial aid programs in the following order: federal loan programs, federal grant programs, state programs, UNI programs, outside agencies, student. You will be notified of adjustments to your financial aid award via your university bill.

## Summer Aid Financial Aid

For financial aid purposes, the summer session is considered the final term of the award year. Federal aid programs have an academic year maximum amount of aid that can be received. For example, if you are a dependent freshman with $0-29$ semester hours you may borrow only $\$ 2,625$ in direct loans for the entire academic year ( 12 months - fall, spring and summer). Therefore, summer aid is limited.

## To be eligible for financial aid for the summer you must:

1. Have a current year FAFSA submitted by May 1.
2. Be enrolled at least half-time during the summer - five credits for undergraduate students and four credits for graduate students. Audited courses, correspondence (specified as "Guided Independent Study" at UNI) courses, and Camp Adventure do not count toward enrollment.
3. Submit a Summer Financial Aid Request form to the Financial Aid Office (available in March).
4. Be admitted to a program leading to a degree. Non-degree students are ineligible for financial aid.
5. Not be on Financial Aid Academic Progress Suspension (see page 20) or Registrar Academic Suspension (see page 58).
6. Not be in default on any educational loan, and not owe any refund on a grant or loan at any institution.

## Grants and Scholarships

UNI Grants. These institutional grants are need-based, non-repayable gifts, ranging from $\$ 400$ to $\$ 1,000$. The exact amount of the grant depends upon the student's financial need as indicated by the results of their FAFSA.

Federal Grants. Federal grants are intended to assist students whose FAFSA results indicate a high level of financial need. The amount ranges from $\$ 400$ to $\$ 4,000$. The federal government has the Pell Grant and Supplemental Educational Opportunity Grant (SEOG) available for undergraduate students who complete the FAFSA and demonstrate high financial need.

State Grants. State grants are available for Iowa students who are enrolled at least half-time who complete a FAFSA and demonstrate financial need. The grants are awarded based upon an lowa undergraduate student's expected family contribution. Iowa grant awards range up to $\$ 1000$ per year. The IMAGES grant is also available for Iowa minority students enrolled at least half-time. Awards range from $\$ 200$ to $\$ 2,000$.

Scholarships. A wide variety of scholarships are available at the University of Northern Iowa for students who are academically qualified. Scholarships are also available to students with outstanding creative or performing talent. Most scholarships for freshmen are awarded to students who rank in the top quarter of their high school class, or from non-ranking high schools and have an ACT composite score of 27 or above. Two-year college transfer students must have a minimum 3.25 cumulative grade point average. For a complete listing of scholarships for incoming freshmen and transfer students, check the financial aid Web site at www. uni.edu/finaid/.

Graduate Scholarships and Assistantships. Several scholarships and awards, including tuition scholarships, are available for graduate students at Northern Iowa. Students should contact the department or academic college in charge of their program for information on eligibility and application procedures. Students may locate the scholarship directory at www.uni.edu/finaid/, which gives a complete listing of all scholarships available for graduate students and currently enrolled UNI students. For further details on requirements related to graduate scholarships and assistantships, see pages 141-142.

Army G.I. Bill. Undergraduates serving in the Iowa National Guard or the U.S. Army Reserves can qualify for the New G.I. Bill. The New G.I. Bill Educational Assistance Benefits provide up to $\$ 2,000$ per year in direct payments, plus the student continues to earn monthly training assembly pay. Many students who qualify for the New G.I. Bill also qualify for the Student Loan Repayment Program. For additional information about the New G.I. Bill write or contact the G.I. Bill representative in the Office of the Registrar at the University of Northern Iowa, Cedar Falls, IA 506140006, 319-273-6801.


Army Reserve Officers' Training Corps (ROTC) Scholarships. Several scholarships are available for students interested in ROTC.
a. Four-Year Army ROTC Scholarships. High school seniors can apply for a four-year Army ROTC scholarship (before November 15th) of their senior year.

A four-year scholarship will pay full tuition and required educational fees; provide $\$ 300$ per semester for textbooks, supplies, and equipment; and provide a subsistence allowance of up to $\$ 3,600$ per year for each of the four years the scholarship is in effect. Winning and accepting a four-year ROTC scholarship does not preclude accepting other scholarships.
b. Three-Year Army ROTC Scholarships. College freshmen apply on campus for all three-year Army ROTC scholarships during January. Winners are announced the following May.

A three-year.scholarship will pay up to $\$ 5,000$ per year toward tuition and required educational fees; provide $\$ 300$ per semester for textbooks, supplies, and equipment; and provide a subsistence allowance of up to $\$ 3,600$ per year for each of the three years the scholarship is in effect. Winning and accepting a three-year ROTC scholarship does not preclude accepting other scholarships.
c. Two-Year Army ROTC Scholarships. College sophomores, juniors, and seniors can attend the Army ROTC Leaders Training Course (LTC) at Fort Knox, Kentucky.

A two-year LTC scholarship will pay up to $\$ 5,000$ per year toward tuition and required educational fees; provide $\$ 300$ per semester for textbooks, supplies, and equipment; and provide a subsistence allowance of up to $\$ 3,600$ per year for each of the two years the scholarship is in effect. Winning and accepting a two-year ROTC scholarship does not preclude accepting other scholarships.
d. Two-Year Reserve Forces Duty Scholarships. Prior service applicants may apply on campus; military reservists may apply
on campus or through their Army National Guard or Army Reserve unit. If selected, you will be required to enlist in the Army National Guard or Army Reserves. You will fulfill your obligation in the Army National Guard or Reserves only. If already in the Guard or Reserve, you incur a six-year commitment of military service.

A Reserve Forces Duty Scholarship will pay up to $\$ 5,000$ per year toward tuition and required educational fees; provide $\$ 300$ per semester for textbooks, supplies, and equipment; and provide a subsistence allowance of up to $\$ 3,600$ per year for each of the two years the scholarship is in effect. Winning and accepting a two-year Reserve Forces Duty Scholarship does not preclude accepting other scholarships.
e. Additional Information. For more information about Army ROTC scholarships, write to the Department of Military Science, ATTN: Scholarship Officer, University of Northern Iowa, Cedar Falls, IA 50614-0142; come in person to West Gym (Room 203), UNI campus; or call the Scholarship Advisor at 319-273-6178 or 319-273-6337.
Department of Art Scholarships are awarded annually to high school seniors interested in art as a major. These scholarships are also available to qualified undergraduate art majors and transfer students. Interested students should contact the Department of Art, Kamerick Art Building 104. Visit the Web site at www. uni.edu/finaid/scholarship.htmh

College of Business Administration. (Specific requirements pertain to each of these awards. Contact the College of Business Administration or the individual department before February 1 for application information. For the CBA Scholar Award, contact the college before September 15 for application information.)

1. Scholarships for graduate students: Day Dugan Scholarship; Irene Thompson Scholarship.
2. Scholarships for undergraduate majors or pre-majors: Robert and Ruth Hill Memorial Scholarship; Merrill J. Oster Scholarship; IES Industries Business Scholarship; Life Investors/AEGON Scholarship; Jason Mrogenski Memorial Scholarship.
3. Scholarships for undergraduates who have attended at least one semester at UNI and are admitted to the College of Business Administration, or Economics Majors with at least 45 credit hours: Alpha Boysen Stewart Scholarship; American Society for Quality Control Scholarship; IES Industries Business Scholarships; J. S. Latta Jr. Scholarship; Maytag Scholarship; Pella Honors Scholarship; Irene Thompson Scholarship; T. Wayne Davis Fellowship; Bill Story Scholarship; Myrtle Minshall Stone Scholarship.
4. Scholarship for Management Information Systems Major or Business Teaching Major: Kay Humphrey Memorial Scholarship.
5. Scholarships for Accounting Majors: Arthur Andersen \& Co. Scholarship; BDO Seidman Scholarship; J.T. Blanford Memorial Scholarship; Coopers \& Lybrand Scholarship; John Deere Scholarship; Deloitte \& Touche Scholarship; Ernst \& Young Accounting Scholarship; Honeywell Corporation Accounting Scholarship; KPMG Peat, Marwick Accounting Scholarship; J. Michael McBride Scholarship; McGladrey Pullen Education Award; Mosebach \& Griffith Scholarship; Jerry B. Paterson Accounting Scholarship; Price Waterhouse Scholarship; Neva Radell Scholarship; Mike Rod Memorial Scholarship.
6. Scholarships for Economics Majors (not aveilable to freshmen): Charles Leavitt Economics Scholarship; F. Russell Glasener Economics Scholarship.
7. Scholarship for Incoming Freshmen: CBA Scholar Award.

Industrial Technology Department. (Contact the department for more specific information about these scholarships.)

1. Tuition Scholarships are awarded annually to high school seniors who plan on majoring in one of the undergraduate programs offered in the Industrial Technology Department. These grants are awarded on the bases of ACT scores, grade point, rank in class, and high scores in the competitive exam and interview held in conjunction with the annual Math/Science/ Technology Symposium. These grants provide tuition exemption for up to eight semesters for students maintaining a major in the Department of Industrial Technology and a minimum cumulative grade point average of $\mathbf{3 . 0 0}$. Interested students should contact the Department of Industrial Technology by the first week in November.
2. Program Area Scholarships are awarded to students with a major in one of the following program areas: Construction. Management, Electro-Mechanical Systems, Graphic Communications, Manufacturing Technology, Technology Management, and Technology Education and Training.
Science, Mathematics, and Technology Symposium Awards are made to high school seniors in the areas of biology, chemistry, computer science, industrial technology, mathematics, earth science, and physics. Awards are based upon academic ability and an examination given each year on this campus. These grants provide tuition awards and/or Student Aid Scholarships for four years. The value of and regulations governing these awards are determined on a yearly basis.

UNI Athletic Grants-In-Aid Awards are available for incoming student athletes as well as returning students. Athletics GIA are awarded in dollar values up to and including full grants of tuition, room and board, and books. Athletics GIA are awarded for one-term periods; however GIAs are renewable in accordance with NCAA and conference rules. GIA recipients must meet NCAA, Conference, and Institutional requirements for admission and/or the satisfactory progress rules of same. Recommendations for athletics GIA awards are made by the coaches of the individual sport programs. Athletics GIA awards are provided in part by the Athletic Club (contributions), gate receipts, friends of the university, and other special accounts.

## UNI Parents Association (UNIPA) Scholarship Program

Five scholarships in the form of tuition grants applied directly to the student's account are awarded annually. One $\$ 1,000$ scholarship is awarded to a student from each of the five undergraduate colleges. Selection is completed in spring and the award realized the following fall semester. Presidential and other full tuition and board scholarship winners are not eligible. To be eligible for consideration a student must a) be a full-time student, b) possess a cumulative grade point average of 3.00 or better, c) have completed at least one semester of course work at the University of Northern lowa, d) be a sophomore, junior, or senior at the time the award is realized, and e) nominate herself/himself by filing an application in the Office of Development, 205 Commons. In selecting the award recipients, consideration is given to a) participation in college, university, and community activities and leadership abilities therein, b) personal statement submitted by the candidate, including career objectives, c) personal interview with the UNIPA Scholarship Committee members, d) potential for leadership in academic major area, and e) grade point average and evidence of other scholarly activities.

For further information, contact Keevan Kosidowski, UNI Foundation, at 319-273-6078.

## UNI Presidential Scholars Program

Presidential and Provost Scholarships are offered through the Presidential Scholars Program. Presidential and Provost Scholars represent a select group of students whose academic interests are matched by personal qualities of leadership, involvement, and service. The Presidential Scholarship is the most prestigious scholarship awarded by the University of Northern Iowa.

The application process needs to be conducted early in the student's senior year of high school. Scholarship applications are typically mailed during the month of August and need to be returned to UNI by the October 1 postmark deadline. The Presidential Scholars Board does an initial screening of applications. After this application review, 45 young men and women are invited to continue through the next phase of the selection process. This phase consists of an interview with the Presidential Scholars Board and the writing of an essay during a visit to the Northern Iowa campus. The 45 students who participate in this phase of the selection process will be offered either a Presidential or Provost Scholarship. Selection is based on academic excellence, co-curricular achievements and leadership, and demonstrated potential for making a significant contribution to society.

Presidential Scholarship. Applicants must be freshmen enrolling directly from high school, rank in the upper $10 \%$ of their high school class (or rank as one of the top five students in a class of 50 or less), and receive an ACT composite score of 29 or above. Students who meet the ACT criterion and have requested that their ACT scores be sent to UNI prior to August 1 will be put on the university=s mailing list and will receive an invitation to apply for a scholarship. (Qualified students may also call to receive an application prior to the October 1 application deadline.) Presidential Scholars will follow a special program of study that includes seminars each semester on a variety of topics and a required senior thesis or project in their major.

Amount: Tuition, mandatory fees, double room, and full board (over $\$ 9,800$ per year in-state and $\$ 16,000$ out-of-state). It is renewable each year for four years by maintaining 3.50 GPA .

Provost Scholarship. Applicants must meet the same criteria as the Presidential Scholars and follow the same application procedures. Provost Scholars are selected from those who interview for a Presidential Scholarship.

Amount: Tuition plus mandatory fees (over $\$ 4,900$ per year in-state and $\$ 11,800$ out-of-state). It is renewable each year for four years by maintaining 3.25 GPA.

## Direct inquiries to:

University Honors Program
University of Northern Iowa
Cedar Falls, IA 50614
319-273-3175
Fax: 319-273-4319
E-mail: jessica.moon@uni.edu
Web site: www.uni.edu/honors

## University of Northern Iowa Foundation

The UNI Foundation is the official channel through which gifts, both large and small, are given for the benefit of the university. The generosity of alumni and friends of the University of Northern Iowa provides scholarships for eligible students. Students should contact the dean of their college or the Office of Financial Aid for specific information on scholarships and selection criteria.

For further information contact UNI Foundation, 319-273-6078 or 1-800-782-9522, e-mail uni.foundation@uni.edu, or visit the UNI Foundation Web site at www. uni-foundation.org.


## Mission Statement Educational and Student Services

Our mission is to promote a student-centered university characterized by high academic standards, enriched learning experiences, and stimulating student-faculty-staff interaction.

We value quality, integrity, caring, and teamwork. These values are practiced through leadership and service to students, to each other, and to the university community.

## Orientation

Orientation programs are offered for new students to acquaint them with available educational opportunities and university services and to assist them in the class registration process. Most new freshmen who begin their study in the fall semester attend a summer orientation program during the preceding June or July. Transfer students are invited to either a spring or summer transfer orientation program. Students who do not begin their study during fall semester attend orientation and register just before classes begin for that term. Parents of new students are invited to participate in a special parent orientation program.

## Housing

www.uni.edu/dor

## Application for Rooms in Residence Hails

Official admission to the University of Northern Iowa is a prerequisite to application for housing in the residence halls. Once new students are admitted, the Department of Residence sends an invitation for the student to apply for housing online. The Department of Residence Web site includes information about each residence hall, the dining operations, and the housing and dining contract. The residence hall and dining contract serves as the official application for housing in the residence halls. The application process includes completion of the contract, payment of the $\$ 25$ application fee and a $\$ 200$ prepayment. Payment is also accepted online. Paper contracts are available and will be sent at a later date to those who do not complete the contract process on the Internet.

The 2 -Year Advantage plan was introduced as a three-year pilot project in 2003. The 2-Year Advantage option features a price freeze for housing and dining rates from year one to year two of the contract.

Room assignments are made on a date-of-prepayment basis. If an applicant finds it necessary to cancel the contract before occupying the room, the prepayment is credited or refunded if cancelled before May 1 for Fall semester or December 15 for Spring semester.

Inquiries should be directed to:
Department of Residence
Redeker Center
Cedar Falls, IA 50614-0252
319-273-2333

## Occupancy

Residence hall occupancy begins officially on the Friday prior to the first day of classes for Fall semester; and the Friday before classes begin for the Spring semester. If a reserved room is not occupied on the first day of classes and arrangements have not been made with the Department of

Residence for later occupancy, the reservation will be cancelled and the prepayment forfeited.

The residence hall and dining contract covers an entire academic year or the balance thereof, separate contracting is necessary for the summer session. If the contract is terminated before the expiration date, appropriate provisions of the contract will apply. The student is responsible for any financial liabilities incurred prior to the date of termination and $30 \%$ of remaining portion of contract.

## Residence Halls

The Department of Residence is designed to provide housing to 4,600 students in nine residence halls. In addition to student rooms, each residence hall offers office support services, lounges, study rooms, recreational areas, laundry rooms, and other facilities for the comfort and convenience of the students. Computer labs are located in residence facilities throughout campus. A professional staff member supports activities that promote academic success and social events that build a strong sense of community.

Floors within each residence hall accommodate approximately 50 students and are designated as houses. Each house sponsors its own social, cultural, and recreational programs. There are houses reserved for first year students, sophomore and transfer students and upper class/graduate students. One resident assistant (a student staff member) lives in each house to serve as a resource person for the members of that house.

Women's halls include Hagemann and Lawther. Coeducational housing is provided in Bartlett, Bender, Campbell, Dancer, Noehren, Rider, and Shull Halls. Continuous housing (during a cademic break periods) is available in Bartlett, Bender, Dancer, Noehren, and Rider Halls. All halls are open during the Thanksgiving and Spring breaks.

## ROTH Complex

Apartment and suite-style housing is open to sophomores, juniors, and seniors. Residents with good academic and behavioral status qualify for housing in ROTH. ROTH residents may prepare their own meals or buy one of the many dining plans available. Students interested in ROTH as their home away from home, can get additional information and submit a contract for ROTH housing online at www.uni.edu/dor or contact Department of Residence, Redeker Center 319-273-2333 or toll free 866-207-9411 or ROTH 319-273-7051.

## University Apartments

One- and two-bedroom unfurnished apartments are available to married students, single parents with families, graduate students, and non-traditional students. Assignments are made on a date-of-application priority basis with married and single student parents with families having priority over graduate and non-traditional students. Information on the University Apartments community is available online at www. uni.edu/dor. Applications and all inquiries should be directed to:

University Apartments Office
3900 Jennings Drive - Hillside Courts
Cedar Falls, IA 50613
319-273-6232

## Dining Service

Dining service is provided in 14 dining operations across campus. The customary "full meal" contract is for 19 meals per week with brunch and dinner only on Saturday and Sunday. Many other meal plan options are available each week. $\mathbf{A}$ student who lives off campus may contract for service among the numerous choices available.

## Housing and Dining Contracts

Contractual responsibilities are reviewed annually and are subject to change. Refer to terms and conditions of the current contract. The current terms and conditions are available at www.uni.edu/dor.

## Academic Services

Examination and Evaluation Services. Examination Services for most major national college and professional school entrance examinations, certification examinations, and credit by examination are offered in the Advising Center. Services are provided for both enrolled graduate and undergraduate students as well as non-students. In addition to test administration, Examination and Evaluation Services provides test registration and preparation assistance, conducts student research, and provides consultation and interpretation. The Services is a resource to students, faculty, and the community concerning many aspects of educational testing and student research.

Reading and Learning Strategies. Academic Services is concerned with the reading skills and learning strategies of all UNI students. Students who suspect that the learning skills they have employed may be inadequate at the university or those searching for time-efficient ways to handle a heavy reading load are advised to register in this office for Speed Reading and Effective Study Strategies. These are free, four-week courses taught in small-group sessions to help students double their reading rate or learn how to manage time, concentrate, take notes, and prepare for exams. Students who want to focus on one of these skills specifically may meet with the Reading/Learning Strategies Coordinator or a peer instructor individually.

Questions related to examinations, testing, evaluation, study skills or tutoring should be directed to Academic Services, East Bartlett Hall, University of Northern Iowa, Cedar Falls, IA 50614-0383.

## Advising and Career Services

Advising Services is designed to assist students in planning their educational programs, developing their academic skills, and using resources of the university to meet their specific educational needs.

Academic Advising. Advising Services coordinates the universitywide advising program, coordinates first-year advising, and serves as the academic center for "deciding students" who are exploring majors. Academic Advising supports Student Athlete Academic Assistance. Academic Advising at Northern Iowa offers students the opportunity to individual- ${ }^{\circ}$ ize their educational experience with a faculty or staff member. Students are assigned to a faculty advisor in their major or a professional advisor in Advising Services if they are in the process of exploring major options.

UNI prides itself in being a caring academic community which places a high value on students' active participation in their educational experience. Our philosophy is one of student-centered developmental advising. This means we place students at the center of our efforts and believe students are capable, with sufficient information and support, of directing their own academic lives at UNI. This requires that students be active participants in the academic advising process. Advisors assist students in selecting appropriate courses and other educational experiences, clarifying life and career goals, developing decision-making skills, and interpreting institutional academic requirements. Students are encouraged to see their advisors, but for the most part they are not required to do so. Through a wide range of advising resources, students are expected to become informed consumers who make considered choices about their personal and educational lives.

Advising provided by Advising Services is open to all students. Students receive assistance in selecting majors, minors, and certificate
programs; selecting courses; scheduling; and identifying and resolving academic difficulties. Individual conferences, special programs, and courses help freshmen, who have not decided upon a major, set realistic first-year goals.

Questions related to new student advisement and undergraduate advising should be directed to Advising Services, Gilchrist Hall, University of Northern Iowa, Cedar Falls, IA 50614.

Information concerning academic advising is available at www.uni.edu/ acaadvis.

Career Services provides services related to the broad areas of career-readiness and to the more specific area of opportunities for graduates. Career Services assists students and alumni with a range of careerrelated questions and concerns. Programs, consultation, and resources from Career Services can be categorized into four areas: decision-making, career exploration, career/employer information, and career-related experience. For further information regarding the following services visit the Web site at www.uni.edu/careerservices or contact the office at 319-273-6857.

Decision-Making. For those wanting assistance with the process of deciding on or changing career directions, Career Services offers written, videotaped, and internet-based information on career options, occupation requirements, and employment trends, as well as career interest inventories and a computerized career guidance program. A credit-bearing course designed to help students make career decisions is available, as well as individual counseling.

Career Exploration. Programs from this area offer students and alumni a variety of ways to explore their career interests by connecting with professionals in settings that range from business and industry to government, education and other nonprofit settings. Career exploration activities provided include job shadowing, informational interviewing, and short-term, noncredit, hands-on career-related experiences. Activities are open to both declared and undeclared majors.

Career/Employer Information. Job-seekers and students exploring career options and oppertunities can find print, video, and computerized information on industries, employers, and job openings, as well as information on job-search processes and strategies. Professional counselors provide one-on-one consultation on locating and using such career- and job-search related information.

Career-Related Experience. The Cooperative Education/ Internship Program helps students to make the transition from college to the professional work world by gaining work experience before graduating. Participants in the program earn academic credit and generally receive pay or a stipend for their work. Cooperative Education/Internship experience provides students with career- and major-related experience and opportunities to develop professional skills. Studies have shown that students with applied experience such as that offered by Co-op/ Internships Program have an edge in the job search process.

Post-Graduation Planning and Assistance. This area assists prospective graduates and alumni from all academic areas and degree levels with preparing for and locating positions in employment and/or graduate school in accordance with their qualifications and personal interests. Services provided include career and job search counseling and advising; an on-line vacancy service; candidate referral to local, regional, and national employers; on-campus interviewing; and career fairs and other recruiting events involving school systems, graduate schools, businesses, government agencies, and nonprofit organizations. The service also provides workshops and other resources on job hunting skills, including mock interviews. Credential services are available to those seeking graduate school admission, as well as to teachers, administrators, and others seeking positions in educational settings.

Individuals are highly encouraged to use Career Services throughout their college careers.

## University Health Services

University Health Services provides comprehensive mental health, physical health, and wellness services to students enrolled at the University of Northern Iowa. Wellness services are also available to employees, retirees, and their families. Services are provided by a professional staff including psychologists, physicians, physician assistants, nurses, health educators, counselors, a pharmacist, and a laboratory/x-ray technician. Services include consultation, treatment, and a full range of health promotion and wellness activities.

## Health Clinic

The Health Clinic is temporarily relocated on the first floor of Dancer Hall for the period May 2004 to August 2005, while the Student Health Center is renovated and expanded to meet students= needs. The Health Clinic will move to the Student Health Center, on the south side of $23^{\text {rt }}$ Street next to the Schindler Education Center, August 2005. Medical and pharmaceutical services will continue throughout that time. The Health Clinic provides out-patient medical services Monday through Friday when classes are in session. Students and spouses, who have paid a health fee, are eligible for care. The clinic includes examination and treatment rooms, a laboratory, $x$-ray, and pharmacy including over-the-counter medications. A referral to an area physician will be arranged, if needed, for treatment requiring specialized care. The Student Health Center has an appointment scheduling system.

No charge is made for routine clinic consultations, but a charge is made for medications, injections, immunizations, $x$-rays, lab tests, and other medical services. Charges may be paid in cash or billed to a student's monthly university statement.

When the Health Clinic is closed, residence hall students may discuss a health problem with their Hall Coordinator or Resident Assistant. Hall Coordinators and Resident Assistants may be able to recognize a need for first aid or medical attention. They can suggest arrangements to students who are ill or injured. Emergency coverage is available at any of the hospital emergency rooms in the Cedar Falls and Waterloo area. Ask-a-Nurse advice may be obtained by calling 319-272-2600.

A group accident and sickness insurance plan may be purchased through the university on a voluntary basis for those without medical insurance. Information on the coverage and the cost of this insurance is available in the Health Clinic. International students are required to have health insurance as a condition of admission and should contact the International Programs Office regarding appropriate coverage. More detailed information concerning services and hours is available at www. uniedu/health.

## Counseling Center

The Counseling Center is temporarily located on the third floor of Bartlett Hall until August 2005, while the Student Health Center is being renovated. In August 2005 the Counseling Center will be moved to the second floor of the newly renovated and expanded Student Health Center. The Counseling Center is staffed with professional counselors and psychologists who provide confidential counseling services to students without charge. Services include:
individual, couples, and group therapy
crisis management
clinical consultation to faculty and staff
class and group presentation on various mental health issues referral services to other programs and agencies
Appointments for counseling may be made directly at the Counseling Center or by calling 319-273-2676. As a general rule, clients in crisis
will be offered services immediately. Clients who are not in crisis will be offered the first available appointment time. More information is available at www. uni.edu/counseling.

## Office of Disability Services (ODS)

The Office of Disability Services is located within the Counseling Center and is temporarily located on the third floor of Bartlett Hall until August 2005, while the Student Health Center is being renovated. In August 2005 the Office of Disability Services will be moved to the second floor of the newly renovated and expanded Student Health Center. The ODS works with students and employees to ensure that all persons with disabilities have access to university activities, programs, and services. Specialized services are provided to enhance the overall academic, career, and personal development of each person with a physical, psychiatric, or learning disability. To obtain information regarding services, call the ODS at 319-273-2676. More information is available at www.uni.edu/ counseling/ODS.html.


## Wellness and Recreation Services

The Wellness and Recreation Center, located next to the UNI-Dome, is home to the School of Health, Physical Education and Leisure Services, an academic department in the College of Education, and Wellness and Recreation Services, a service program in the Division of Educational and Student Services.

The mission of Wellness and Recreation Services (WRS) is to enhance the personal, professional, and academic lives of university students, faculty, and staff. This is accomplished through: structured and self-directed activities for fun, competition, fitness, leisure, and socialization; educational programs and services for health of mind, body, and spirit; skill-and-leadership-building activities, including student volunteer, internship, and employment opportunities; and campus-wide initiatives to enhance the living and working environment of the university community.

## Specific WRS programs include:

informal recreation/fitness/aquatic opportunities personal fitness services
intramural sports
instructional activities
outdoor recreation programs and equipment rental, along with in door climbing opportunities
sport clubs
health and wellness programs
substance abuse prevention and education programs
sexual abuse prevention programs and victims services
To meet the needs and interests of the campus community, WRS programs and services are not only offered in the Wellness and Recreation Center, but at a variety of sites throughout campus. Customer service is always a priority. Therefore, input and suggestions from students, faculty, and staff are given serious consideration. Besides personally contacting any of the WRS staff, program input can be made through the WRS Advisory Committee, which consists of a representative group of students, faculty, and staff. A list of committee members is available at the WRS Office or through the WRS Web site www. uniedu/wellrec.

## Division of Vocational Rehabilitation Services

Vocational Rehabilitation Services is a state agency funded with federal and state monies. The University of Northern Iowa provides office space for a counselor and secretary in the Student Services Center, room 126. If a student has a physical or mental impairment which constitutes or results in a substantial impediment to employment, they are eligible to apply for services. Students will be required to discuss and/or provide documentation of their disability. Students may apply for services if they are having difficulty with course work or accessing services on campus due to a disability issue.

Rehabilitation Services may include:
medical and psychological assessment
technological assessment
vocational assessment
counseling and guidance
physical and/or mental restoration services which may include therapy, wheelchairs, hearing aids, eye glasses, etc.
special adaptive equipment or devices
training for employment - tuition assistance may be provided based on financial need
personal assistance
assistance with job search
Students who are interested in more information about Vocational Rehabilitation Services may contact the office at 319-273-6348.

## International Services Office

Undergraduate and graduate students who come to UNI from countries throughout the world are served by a central office. Through the International Services Office, students are assisted in making arrangements to come to the campus from their home countries and in their daily campus activities while they are pursuing their educational careers.

The Office of Admissions receives and acts on undergraduate applications, while International Services receives and processes graduate applications. It is the responsibility of International Services to issue Certificates of Eligibility to all admitted students (both F-1 and J-1) and invited scholars/researchers/professors. The office sends out housing contracts for on-campus housing along with other pre-departure information to all admitted undergraduate and graduate students, and meets the students at the Waterloo airport when they arrive.

Throughout the year, International Services sponsors educational and social programs. Students may also seek the assistance of the International Student Advisor in academic, personal, and immigration matters.

For information concerning international admissions, consult the Web site at www. uni.edu/intladm. For additional assistance, undergraduate applicants should contact the Office of Admissions at 319-273-2281 or write to the Office of Admissions, UNI, Cedar Falls, IA 50614-0018. Graduate inquiries should be directed to the International Services Office at 319-273-6421 or write to International Services, UNI, Cedar Falls, IA

50614-0521.

## Student Activities and Honors

Co-curricular activities are encouraged at the University of Northern Iowa because of the important contribution these activities make to the total education of the student. The university maintains an extensive program of co-curricular activities: intercollegiate athletics, theatre, forensics, publications, music, social life, student organizations and interest groups, intramural sports and recreational activities, and sports clubs.

Speech and Debate. The forensics program (speech and debate team), under the auspices of the Department of Communication Studies, encourages participation of all interested students, both in debate and individual events regardless of major. The forensics squad participates in some 30-35 intercollegiate forensic meets per year on a regional and national basis. Participants may choose to enter debate or individual events. Further information is available at www.chfa.uni.edw/comstudy/ arganizations/forensics.asp.

Fraternities/Sororities. There are four social sororities and six social fraternities, each nationally affiliated, on the campus. There are also a number of historically Black Greek organizations active on the campus that provide service, social, and leadership opportunities. Persons interested in Greek life must go through a formal or informal recruitment process held at the beginning of each semester. Leadership development, scholarship achievement, and service to the university and community are stressed as important facets of individual development. The activities of the sororities are coordinated through the Panhellenic Association, those of the fraternities through the Interfraternity Council. Achievement in Greek life is recognized by the local chapter of the National Order of Omega, an honor society for outstanding men and women with fraternal affiliation. Information may be obtained from the Student Involvement and Activities Office, which is located in Maucker Union.

Honor Organizations. Superior achievement in various academic disciplines and in extracurricular activities is recognized in honor organizations. Information on these organizations may be obtained from the Student Involvement and Activities Office, Maucker Union.

Intercollegiate Athletics. Various intercollegiate sports are available to both men and women at UNI. The university engages in intercollegiate athletic competition in a total of 18 sports. Men may participate in baseball, basketball, cross country, football, golf, indoor and outdoor track, and wrestling. Women also compete in basketball, cross country, golf, and indoor and outdoor track, as well as in soccer, softball, swimming, tennis, and volleyball.

UNI Athletic teams participate within Division I (Football IAA) of the NCAA. The University Athletics Program is a member of the Missouri Valley Conference and the Gateway Football Conference. All eligibility for and sport competition is governed by NCAA, Conference, and university rules and regulations. In some instances, university rules and regulations may be more restrictive than NCAA and Conference.

Interest Organizations. Numerous organizations sponsored by departments and specialized interest groups provide students the opportunity to become better acquainted with other students and faculty as well as to explore leadership skills and perpetuate interests outside the classroom. Many of the organizations have no membership requirements other than an active interest in the work for which the club exists and regular attendance at the meetings. Information on specific interest organizations can be obtained in the Student Involvement and Activities Office in Maucker Union.

Music. Music organizations and ensembles are open to all students by audition. Participation by non-music majors is encouraged. Credit is available to all who participate. Among the groups offered are: Concert

Chorale, Chamber Choir, UNI Singers, Women's Chorus, Varsity Men's Glee Club, Cantorei Singers, Women's Unity Chorale, Basketball Pep Band, Wind Symphony, Panther Marching Band, Symphonic Band, Jazz Bands, University Orchestra, Opera/Music Theatre, plus several instrumental ensembles. For further information go to www.uni.edu/music.

Northern lowa Student Government. The legislative branch of Student Government at UNI is the Student Senate. The executive members include the president, vice-president, director of administration, and director of programming. A Supreme Court, which comprises the judicial branch, also exists. Elected senators are chosen on a population basis from university housing, off-campus housing, and the student body at large. The Northern lowa Student Government promotes cooperation between students and faculty, seeks solutions to student concerns, and represents the entire student body in matters affecting student interests.

Professional Performing Arts on Campus. See "The Fine and Performing Arts at UNI" section on pages 37-40 for more information.

Religion. Surrounding the campus are various student religious centers. Information on specific religious organizations may be obtained in the Student Involvement and Activities Office on the plaza-level of Maucker Union.

Social Life. The social life at the University of Northern lowa is flexible, designed to meet the ever-changing interests and needs of the students and university community. Social opportunities include popular and cultural film programs, art exhibits, fine arts productions, live musical entertainment, dances, campus-wide events, speaker programs, forums, and community service projects. Much of the program planning relies heavily on student involvement. Information pertaining to involvement is available through the Student Involvement and Activities Office in Maucker Union.

Station KULT-LP. Station KULT is the student-managed and -operated radio station of the University of Northern Iowa. The station operates at 94.5 FM and on Channel 5 of the Campus Cable Television System. KULT programming consists of music, UNI sporting events, and news. The studios and offices of KULT are located in the lower level of Maucker Union. For further information go to www. uni.edu/KULT.

Student Government. The student government associations include the Northern lowa Student Government, the Residence Halls Association, the Interfraternity Council, Panhellenic, the Union Policy Board, and the
individual residence hall senates.
Student Publications. The Northern Iowan is written, illustrated, and edited by students for campus-wide distribution. This student newspaper is distributed twice a week during the fall and spring and once a week during the summer session.

Theatre. Any enrolled student is welcome to audition or volunteer for production responsibilities in the major productions or many student productions produced by Theatre UNI and UNI Lyric Theatre. Seasons typically include classical, modern and contemporary drama, opera, musical comedy, and theatre for youth. The theatre also produces in the summer season. All members of the university community are invited to attend productions in the Strayer-Wood and Bertha Martin Theatres. For additional information visit the Web site www.uni.edu/theatre.

Union Policy Board. The Union Policy Board of Maucker Union is composed of twelve students and six non-students. The Board recommends policy and regulations for the operation of the Union, and assists with the programming events in the Union. In addition, it reviews fiscal matters and makes recommendations pertaining to the budget. Its officers are a president, vice-president, and several committee chairs. The president and vice-president must be students.

Wellness and Recreation. Wellness and Recreation Services, located within the Wellness and Recreation Center, offers campus-wide programs in informal recreation/fitness/aquatic opportunities, intramural sports, instructional activities, as well as various health, wellness, and educational programs. The Wellness and Recreation Center provides: multipurpose courts for basketball (10), volleyball (10), badminton (27), and tennis (4); six racquetball courts; a leisure pool with whirlpool and water slide; an eight lane, 25 -yard lap pool; four multi-purpose activity rooms; a dance studio; a 40-foot dimbing wall; an Outdoor Recreation Center; a free-weight workout room; a spacious fitness area with cardiovascular and strength training equipment; a running track; a wellness resource lab with a relaxation and massage room, self-care and wound-care stations, a wellness library and small computer center; and men's and women's locker and shower facilities. For more information visit the Wellness and Recreation Services Web site at www.uniedu/health/wellrec.


## University Facilities and Educational Services

## University Facilities Rod Library

## www.library.uni.edu

Centrally located on campus, and serving the UNI community through Internet-based collections and programs, Rod Library supports the curricular, informational, and research needs of UNI's students and faculty.

Rod Library occupies a modern, 238,000 square-foot, four-story building in the heart of campus. The library building provides seating for 1,600 library users at study carrels and tables, and has more than 550 additional seating spaces in lounge areas and in group, graduate, and faculty studies. Rod Library also houses the University Archives, a Student Computer Center managed by the university's Information Technology Services, the School Library Media Studies program of the Department of Curriculum and Instruction, and a Print Services facility.

Library collections include more than 920,000 paper volumes, 3,300 current periodical and newspaper subscriptions in print and online, and subscriptions to an increasingly broad array of full-text electronic databases. Other collections include: 270,000 U.S. paper documents, 300,000 U.S. and lowa documents on microfiche, and 40,000 flat maps.

Additional Rod Library collections include: general reference, U.S. and Iowa depository documents and maps, art and music, youth materials collection, career materials, and special collections. Circulating books and the current and bound journals collections are in open stacks, shelved by the Library of Congress classification system. The Reference Collection includes resources in all disciplines taught at the university. The Art \& Music collection includes reference sources for those subject disciplines, and has an extensive collection of records, cassettes, and compact disks, as well as listening rooms and equipment. Art \& Music also provides networked streaming video to support courses in the School of Music. The Youth Collection holds a representative sample of fiction and non-fiction materials for K-12 students.

Rod Library faculty and staff provide reference, interlibrary loan, library instruction, and many other library services to assure an informa-tion-rich academic environment for study, teaching, and scholarship.

## A few Rod Library services of special note are:

UNISTAR-UNI's integrated, online library system supporting an online public access catalog, automated circulation and acquisitions functions; reserves; and interlibrary loan;

Online access to LEXIS/NEXIS, PROJECT MUSE journals, ERIC, and many other databases and full-text scholarly journals. Most computer databases are available to UNI students and faculty from within the library building and online through the Web via Rod Library's home page at www.library.uni.edu;

## UNI's Video collections;

Networked computer instruction facilities and programs;
Self-serve photocopying; and
Microform reader-printers.
Interlibrary loan for many items not held by Rod Library locally, see www. library. uni.edu/access/illexp.html

Special Collections includes rare books and specialized materials such as the (Senator Charles) Grassley Papers and the American Fiction Collection. The University Archives holds historical materials concerning the Iowa State Normal School, the Iowa State Teachers College, the State College of Iowa, and the University of Northern Iowa. For an extensive introduction to the history and other aspects of the University of Northern Iowa, see the Special Collections and University Archives Web page at www. library. uni.edu/speccoll/index.html.

The Rod Library building is open 100.5 hours per week during the spring and fall sessions. Summer hours are set according to the require-
ments of curriculum offered during the various summer sessions. Variations from regular schedules are posted in the main lobby of the library and are published in the Northern Iowan and on the library's Web page. Many Rod Library collections are available via the World Wide Web 24 hours a day at www. library. uni.edu.


## Maucker Union

The Maucker Union, located east of the UNI Library, serves as an informal meeting place for students, faculty, staff, alumni, and guests of the university. The unique facilities of Maucker Union are useful for a wide range of activities including cultural, recreational, and conference events.

General services include: a campus information center, check cashing service, meeting rooms, a billiards game room, and dining services. The building houses the offices of the campus newspaper, student government, student radio, the Multi-Cultural Center, and other student organization offices.

The Student Involvement and Activities Office of Maucker Union is responsible for the programs which focus on co-curricular development of the student. Leadership development, skills development, support for student organizations/interest groups, Greek life, and programming are central to this office and Maucker Union as a whole.

Social and cultural activities include art exhibits, movies, comedy, forums, and lectures. Maucker Union is financed through fee monies, general education funds, and income-producing services within the building.

More information about Maucker Union and special programs and events can be obtained at www.uni.edu/maucker.

## The Commons

Students, staff, and university guests use the Commons in a variety of ways. Housed within this building are the Georgian Lounge and the Slife Ballroom. The Georgian Lounge is used for teas, receptions, and other special occasions. The Slife Ballroom is a multi-purpose room used for banquets, dances, lectures, and student activities.

## University Museum

The University Museum, accredited by the American Association of Museums, is used extensively as an educational resource by both university classes and regional schools and as a cultural facility by local organizations and individual visitors. The museum offers permanent and changing exhibits, tours, lectures, and special programs, such as films, presentations, performance, and ethnic meals. Faculty and students can make use of the exhibits and collections through class projects, collection study, research, and internships for a wide variety of academic disciplines.

The collections of the museum embrace four major subject categories: geology, biology, anthropology, and history. The geology collection consists of minerals, rocks, and fossils of worldwide distribution. The biology area includes a bird collection consisting of most birds indigenous to the midwest as well as some exotic, rare, and extinct species. Large and small mammals, reptiles, fish, anthropods, and marine invertebrates, including a vast collection of shells from around the world, are also a part of the biology collection. The history collection contains items related primarily to early lowa education, the campus, and historical costume. The anthropology section includes prehistoric and ethnographic collections from North America, South America, Africa, Asia, the Pacific Islands, and the Middle East.

A public support group known as the Friends of the UNI Museum serves to help the Museum through financial and volunteer support. Membership is open to anyone with the desire to see the museum grow and expand its services.

Located at 3219 Hudson Road, the museum is open, free of charge, daily from 9:00 a.m.- 4:30 p.m. during the school week. It is closed on legal and university holidays. The museum is open on Saturdays and Sundays from 1:00 p.m.- 4:00 p.m. Although large groups such as clubs and classes are asked to telephone or write the museum for appointments, all other visitors are invited to come without appointments any time the museum is open.

For further information visit www. uni.edu/museum.

## Marshall Center School

Built in 1893, the Marshall Center School is a symbol of UNI's contribution to lowa's long record of excellence in education. This historic structure was moved from Pocahontas County in western Iowa to the campus in 1987 to celebrate the early history of the campus as a teachers college. It now serves as a museum telling the story of early Iowa education.

The school served as a school, community meeting place, township school board meeting room, and voting place from 1893 until 1944. It has been restored and furnished as it would have looked circa 1922 and is one of the most authentic one-room school museums in Iowa. Programs are presented at the school to campus classes, regional elementary school groups, and the general public. Storytelling, reenactments, and presentations help visitors step back in time to visualize a typical day at a rural school.

The school is located at the corner of $23^{\text {rd }}$ and North Minnesota Streets and open Friday and Sunday from 2:00 to 4:00 p.m. Programs for campus groups, classes, and public groups can be scheduled by contacting the University Museum.

For further information visit www.uni.edu/museum.

## Broadcasting Services

Administratively housed in the College of Humanities and Fine Arts are UNI's two separately-programmed public radio services. KUNI-FM serves the Cedar Falls/Waterloo, Cedar Rapids, and Iowa City areas at 90.9
on the dial. KUNI can also be heard at 98.7 in Dubuque, 94.5 in the Quad Cities, 96.1 in Des Moines, and 91.5 in north central Iowa via KUNYFM in Mason City. KUNI/KUNY broadcast quality music and public affairs features each day. KHKE-FM, at 89.5 on the dial, serves the Cedar Falls/Waterloo metro area with a jazz and classical music format. KHKE is also heard at 90.7 in Mason City, and at 1010 AM in northern Iowa and southern Minnesota, via KRNI-AM in Mason City. Students majoring in Electronic Media in the Department of Communication Studies serve as interns for the two stations.

For further information, visit KUNI on the Web at KUNInadio.org, fax KUNI at 319-273-7911, or toll-free 1-800-772-2440 extension 0. Visit KHKE on the web at KHKE.arg.

## Office of University Marketing \& Public Relations

The Office of University Marketing \& Public Relations, in concert with the various university constituents, develops and coordinates the implementation of an integrated marketing program. Designed to enhance the visibility and to accurately project the culture of the University of Northern Iowa, the plan reflects and works toward the goals of the university $=$ s strategic plan through the judicious use of a variety of communications. Areas of public relations emphasis and thematic approaches in publication and advertising design correspond with and support the mission and select areas of excellence. Priorities are set within these parameters.

A high priority of the Office of University Marketing \& Public Relations is media relations, which includes developing internal credibility to assure that information is provided to media accurately and in a timely fashion. Prompt response to media queries and counsel to university officials in crisis situations are of primary importance. The office recognizes that news media are not in the business of promoting the university, and that their dissemination of our information to their readers/viewers on such things as programs, activities, or cultural events is done as a public service.

Of equal importance to the Office of Marketing \& Public Relations is the projection of the institutions's image and vision through communications media that are designed with integrity and consistency of central message, and in compliance with institutional identity standards.

Central to all the office's efforts is the portrayal of outcomes that best illuminate the university's core goals. Student achievernent, faculty research and accomplishments, the results of programs and initiatives, the partnerships that affect economic development, and promotion of the liberal arts core curriculum all comprise tangible evidence of UNI's mission.

For more information, visit our Web site www. uni.edu/pubreh, phone 319-273-2761, or fax 319-273-2888.

## The University of Northern lowa Alumni Association

The Alumni Association's beginnings date back to the days of the Iowa State Normal School. At the commencement exercises of the Class of 1879 , it was decided that the graduates would meet again in one year for the first alumni social. On June 22, 1880, the class met on campus and drafted a constitution and program that would set the course for what is now the University of Northern Iowa Alumni Association.

In 1972 the Board of Directors voted to incorporate and instituted a dues-paying membership program. The membership fees are used to support the wide variety of programs and services offered to alumni and friends of the university. Today, the Alumni Association has over 7,500 members and hosts over 25 alumni events per year.

## Alumni \& Friends Network

This volunteer program at the University of Northern Iowa enables alumni and friends to share their talents with current students and help shape the university's future. This program allows alumni to identify which areas are of interest to them and how the university could utilize their talents to promote the university or offer a valuable experience to a current student. Opportunities include representing UNI at various public events, providing internship or job shadowing opportunities to current students, and/or serving as a regional contact for alumni relocating to a specific area. For more information or to volunteer, please contact the Alumni Association.

## Heritage Honours Awards

The Heritage Honours Awards program recognizes graduates who have achieved significant personal and professional accomplishments since graduating from UNI. Award categories include the Alumni Achievement Award, Alumni Service Award, and Young Alumni Award. The awards are presented during the spring commencement ceremony. Please contact the Alumni Association for an official nomination form.

## UNI Alumni Events

The Alumni Association hosts alumni gatherings in many cities across the United States. These events bring area alumni together for the opportunity to socialize, network, and reconnect with the university. Many events feature guests from UNI who provide updates on campus activities and programs. The association also hosts class reunions on campus for the $50^{\text {th }}$ and $60^{\text {th }}$ anniversary classes. The $25-, 30-$, and 40 -year classes are honored during Homecoming weekend.

## Publications

The Northern Iowa Today alumni magazine is mailed to all alumni. UNI News is an e-newsletter published six times per year and sent to all alumni with valid e-mail addresses on file. Both publications provide news from the Alumni Association, as well as information on campus events and activities.

## Legislative Advocacy

The Alumni Association plays an active role in carrying out UNI's action plans in the Iowa State Legislature. The association assists UNI's Office of Governmental Relations with UNI Together in Education (UNITE), an organization of alumni and friends dedicated to advocacy for UNI. For more information, please visit UNITE online at www. uni.edu/govrel/unite or contact Keith Saunders '94, Associate Director of Governmental Relations, 319-273-6144.

## UNI STAT Students Today Alumni Tomorrow

UNI STAT is a dues-paying organization for UNI students. Members receive discounts at area businesses, invitations to special UNI STAT events, and chances to win prizes all year long. Members also receive a benefits package including a UNI STAT $t$-shirt and calendar of events. To join, $\log$ on to www.unialum.org/stat or call 319-273-2355.

Inquiries should be directed to:
UNI Alumni Association
319-273-2355
e-mail info@unialum.org
www.unialum.org

## The University of Northern Iowa Foundation

The University of Northern Iowa Foundation is a non-profit corporation formed in 1959 to assist the university in projects which are
vital to its growth and development but are most appropriately financed from private funds. Many accounts within the foundation have been established as memorial funds for members of the faculty, staff, or alumni. Through its annual giving program, the foundation proves alumni and friends of the university an opportunity to assist in extending the usefulness of the university, providing that margin of excellence which is characteristic of a quality university. As an additional service for alumni and friends, the foundation staff assists in estate planning.

The foundation is the official channel through which private gifts are given for the benefit of the University of Northern Iowa. Individuals and organizations are assured of continuity of management of such funds and of their being used for the purposes which the donor intended. As a charitable organization, all gifts to the foundation are tax deductible.

Gifts or questions should be addressed to:
UNI Foundation
University of Northern Iowa
Cedar Falls, IA 50614-0282
319-273-6078 or 1-800-782-9522
www. uni-foundation.org

## Educational Services

## Information Technology Services

Information Technology Services (ITS) provides support for computing and networking; multimedia, distance learning, satellite uplink and downlink, imaging, video distribution and production, courseware production, instructional Web page design, administrative systems, telephone services, office and productivity software, technology training and consulting to the students, faculty, and staff of the University of Northern Iowa. The university's extensive computing resources are available through an expanding network and complemented by documentation, training, and consulting services.

The Network. A multi-layered, campus-wide data communication network provides primary access to the UNI computing and information resources. The network consists of a fiberoptic backbone interconnecting university mainframes, minicomputers, Local Area Network file servers, and network access servers. Individual workstations may be connected to the network directly, through local area networks, or via modems and telephone lines. A subset of the UNI network, ResNet, provides highspeed local area network connections to all residence hall rooms. The network provides access to all major UNI computing resources, including resources provided through the Rod Library, the colleges, and divisions.

The UNI network is an Internet domain (uni.edu). UNI's Internet membership enables students, faculty, and staff at UNI to gain access to an extensive and rich variety of computing and information resources from all over the world. Access to the Internet and Internet2 is via a DS3 ( 45 Mb ) connection to the Iowa Communications Network (ICN).

Central Facilities. Academic use of central systems is spread across a variety of platforms. Electronic mail and statistical computing is provided through a cluster of Hewlett-Packard Alpha systems running the Open-VMS operating system. UNI's World Wide Web (WWW) space is a complex mix of UNIX and Microsoft 2003 servers providing development and storage capability for web development. A portion of the UNI WWW space is also housed on college and division servers. All faculty have access to a course management platform, WebCT, enabling them to create modern learning environments for students. The Multimedia Storage, Production, Conferencing, and Distribution (MSPCD) system includes a large network-accessible storage facility available to both faculty and staff to store and deliver multimedia materials.

Information in the central administrative database resides on an IBM mainframe running the MVS operating system. SUN hardware run-
ning the SOLARIS operating system serves as the platform for the Modern Executive Management and Financial Information System (MEMFIS). Many self-service applications and information, as well as other university databases and computer files, are easily accessible through a Web-based portal called MyUNIverse (http://my.uniedu). Students use this system to access biographical information, transcripts, class schedules, registration, along with a variety of other applications and resources. It also provides faculty and staff with efficient access to various reports, forms, and self-service applications.


Student Computer Centers. Hundreds of microcomputers are available for student use in Student Computer Centers strategically located throughout campus. The computers in these centers are connected to the UNI network for access to all campus computing resources. Equipment in these centers consists of Windows based personal computers running the latest Microsoft Office and other software. Laser printers and scanners are available in all of the centers.

The Student Computing Advisory Committee plays an active and meaningful role in recommending policies, priorities, and strategic plans for the Student Computer Centers as well as other student and university computing resources.

Special Facilities. In addition to campus-wide computer centers, colleges maintain a variety of specialized facilities. For example, the College of Natural Sciences provides graphics capability of varying types using IBM compatible systems and Apple Macintoshes. The College of Social and Behavioral Sciences provides digitized and plotting equipment as part of its Geographic Information System. The College of Humanities and Fine Arts uses Macintoshes in a special music lab and in a graphics arts lab. The Colleges of Business and Education also maintain facilities with specialized applications for students in those disciplines.

UNI is an Affiliate Member of the National Center for Supercomputing Applications, located at the University of Illinois. This affiliate membership provides supercomputer access to students and faculty members whose academic pursuits require it.

Software. Programming languages available through the UNI network include Ada, APL, BASIC, C, COBOL, FORTRAN, Pascal, and MACRO.

Statistical packages include SPSS, SPSS Graphics, Minitab, SAS, SAS Graphics, and several microcomputer-based statistical packages.

WebCT is the current learning management system used in many courses. UNI serves as the WebCT Institute for the state.

A variety of popular web page development software is available, as well as HTML editing.

Word Processing software includes Microsoft Word and a number of editors available on a variety of equipment ranging from microcomputers to central systems.

Other software resources include popular spreadsheets such as Excel,
communications software such as Mozilla and Internet Explorer, and database software such as Microsoft Access, along with a variety of specialpurpose and discipline-specific offerings.

Services. A Computer Consulting Center is available during normal working hours for answering computer-related questions and assisting with the solution of problems. The Consulting Center telephone is answered by machine at times when staff are not available. Responses to questions are generally provided within one working day. A comprehensive collection of documentation is available from a variety of sources, including the computers themselves, UNI's World Wide Web pages, the Consulting Center assistants, and the ITS staff.

StudioIT (Studio for Innovative Teaching) is available for faculty use throughout the semester by completing a request form available on the website. Equipped with a SmartBoard, video conferencing unit, twenty wireless laptops, and flexible tables and seating, this room allows for a customizable setting enabling high interaction and the capability for the extensive use of technology.

Extensive technology training is offered to faculty, staff, and students. Workshops designed specifically for incoming students are offered along with general workshops for the entire university community. Several series of workshops are offered to students for one hour of credit. Each week during the academic year there are typically six to eight offerings, all free of charge to UNI faculty, staff, and students. In addition, through grants and contracts, specialized training is provided to off-campus constituencies throughout the state.

Consultation, design, and production for imaging and courseware are provided for a wide variety of media. Services include design and development of inștructional Web sites; multimedia courseware applications; audio and video digitalization; CD-ROM and DVD production and duplication (data, audio, video, photo) within copyright guidelines; digital photography; digital design schemas and imaging, digital motifs, logos, portfolio designs; music and sound effects for production programming, video/audio recording in studios and other campus locations; video/audio editing; video/audio copying, TV format and standards conversion; consultation and design services for equipping and maintaining multimedia classrooms. Support, coordination, and training are also provided for using the Iowa Communications Network (ICN) for distance learning and multimedia conferencing.

Media is distributed over cable and other TV systems on campus and in Cedar Falls. Satellite downlink is supported to receiving satellite-based programs and conferences as well as providing uplink capabilities to support interactive participation. Video conferencing services are available through the Internet.

Student employees are heavily utilized to assist in providing technology services. Students working in this capacity receive extensive training along with professional supervision and experience that augments and enhances their academic experience at UNI.

## Instructional Resources and Technology Services

www.uni.edu/coe/irtsweb

Instructional Resources and Technology Services, within the College of Education, provides service and resources for teacher education students and faculty. Many of the services are also available for N/K-12 grade teachers and administrators. IRTS offers resources and technological services.for the pursuit of curriculum and instructional development.

The mission of the Instructional Resource and Technology Service facility is to provide students, faculty and in-service teachers/ administrators with laboratories in which to examine and evaluate new curriculum resources. These resources include textbooks, professional
materials, computer software, Macintosh and Windows microcomputers, and multimedia systems.

Instructional Resources and Technology Services consists of the Curriculum Laboratory, Macintosh Laboratory, Windows Laboratory, and Technology Methods Lab.

The Curriculum Laboratory is located in Room 222 of the Schindler Education Center. Materials available in the Curriculum Laboratory include N/K-12 textbooks, curriculum guides, resource units, professional books, education journals, kits, games, and software. The lab provides group orientations, consultations, reference assistance, a reserve desk, bibliographies, newsletters, and new materials notices.

Macintosh Laboratory in the College of Education is located in Schindler Education Center, Room 206 within IRTS (SEC 222). Faculty and students make use of this space for classes and open student computer use. Designed for instruction, this lab has 21 eMac computers with Zip drives and scanners.

Windows Laboratory for the College of Education is housed in Schindler Education Center 123A. This instructional lab is equipped with 18 new Windows computers equipped with an internal Zip drive, CDROM drive, scanners, and speakers.

Both the Macintosh and Windows laboratories are instructional labs in which classes are held. The labs have software collections consisting of numerous N/K-12 grade non-networked educational packages. All IRTS software programs are cataloged and accessible via a UNISTAR search of the IRTS collection.

The computers use software that accommodates all standard productivity needs including spreadsheets, database management, and word processing. Each lab has a projector for displaying images from the instructor station. Computers are available on a walk-in basis when classes or workshops are not in session.

The purpose of the Technology Methods Lab (TML) is to explore models for technology-rich K-12 classrooms. This is an environment where pre-service and professional teachers can gain experience with the use of computing technology for teaching and learning. The lab is not a general purpose computing lab, but an in-depth learning lab for innovative computing applications in the UNI teacher education curriculum. Thirty-one eMAC desktop computers are available as well as one presentation station. Currently, the lab owns more than 150 different software titles relevant to various curricular areas. This teaching lab is housed in Schindler Education Center, Room 127/128.

Visit the COE Web site for more detailed information: www. uni.edu/ coe/irtsweb/services/labs.shtml

## Educational Opportunity Programs/ Special Community Services (EDP/ SCS)

The University of Northern Iowa places a high priority on providing quality education to financially disadvantaged and minority students. To fulfill this commitment for all students, the university has established the Office of Educational Opportunity Programs and Special Community Services.

The Educational Opportunity Programs (EOP) are designed and coordinated specifically to meet our students' educational, social, and financial needs. A primary goal for the EOP staff is to provide supportive services to all project students, thus enhancing the successful completion of the student's college career.

The Educational Opportunity Programs and Special Community Services structure includes the following working components:

The Center for Academic Achievement provides the university community with a variety of supportive services that will enhance students' academic achievement and persistence toward graduation. Staffed
by full-time professionals and part-time student assistants, the center focuses on the areas of math, writing, study/life skills, and community service involvement. The goal of the center is to provide UNI students long-term, transferable learning skills that can be used both in and out of the classroom. The center also serves as a resource for faculty and staff as a support system for student learning.

The Math Lab provides individualized and small group instruction and practice in math and related disciplines.

The Writing Center offers individualized assistance to students in all aspects of the writing process within any academic discipline.

The course Academic Skills Achievement Program (200:180) offers university students of all majors the opportunity to provide a community service and tutor children/youth in a variety of educational settings.

The center staff is also available to provide supplemental advisingtype services to students needing additional help.

The Educational Opportunity Center program is an educational academic and counseling program, which promotes post-secondary education in communities with large populations of low-income and first-generation adults who are often unaware of education and career opportunities. Professional career and education counselors assist eligible adults to select a postsecondary institution or training program suited to their interests, assist clients with the completion of admission and financial aid applications, and provide academic development workshops (study skills, test taking, writing and basic reading, and math skills).

The Educational Opportunity Center program also coordinates job and college fairs, media promotion of education, which provides education and career information for their communities. All services are free of charge.

The GEAR UP Program was funded by the Department of Education in the amount of $\$ 1.27$ million for a period of five years. The purpose of the Gear Up grant is to provide Logan Elementary School students with the skills, motivation, and preparation needed to pursue postsecondary education. The program will 1) inform students and their parents about college options and financial aid, 2) develop a solid academic foundation, 3) promote improvement in teaching and learning methods, and 4) provide ongoing staff training and professional development.

The Educational Talent Search Program is an educational counseling service designed to assist 1,300 students to continue in and graduate from high school and enroll in an educational program beyond high school, and also to assist high school and college dropouts to return to an educational program.

Assistance is provided through counseling regarding the variety of opportunities for further schooling, information regarding admission and financial aid application processes, advice on career choices and appropriate postsecondary institutions, college tutors, workshops, and tutoring. Students in $6^{\text {th }}$ grade through age 18 are eligible to participate in the program.

The McNair Scholars Program (Ronald E. McNair Post-baccalaureate Achievement Program) is designed to encourage low-income and first-generation undergraduate students, especially minorities, to consider careers in college teaching as well as to complete advanced degrees through effective preparation for doctoral study. Students who participate in the program are provided with academic enrichment programs that provide tutoring, academic counseling, summer internships, financial aid and admissions assistance, research opportunities, and a faculty-directed mentoring program.

The Department of Military Science administers the Army Reserve Officers' Training Corps (ROTC) program at the University of Northern Iowa. Credits earned in the department count as general elective credits toward baccalaureate degree requirements or a minor in Military Science. All instructors in the department are career U.S. Army Officers. The course of instruction is designed to be a four-year program. Students
with prior military experience may be allowed to complete the program in two years. Students who desire to receive a commission as an officer in the U.S. Army will be required to contract with the Department of the Army during the final two years of the course. They will receive $\$ 3,500$ per year stipend for two years and will incur a service obligation upon graduation.

The Student Support Services Program was established at the University of Northern lowa to provide services to low-income, first-generation, and disabled college students. Program services are designed to increase the retention and graduation rates of eligible students, and foster an institutional climate supportive of the success of low-income and firstgeneration college students and individuals with disabilities.

The primary goals of the UNI Student Support Services are:

- to identify and select project participants who meet eligibility requirements and demonstrate an academic need for project services in order to successfully pursue a post-secondary education program;
- to improve and/or maintain the academic performance level of each Student Support Services participant for continued persistence and, ultimately, graduation from UNI;
- and to provide opportunities for participants to enhance their intellectual, cultural, and social development.
The program offers a number of free services to achieve these goals, such as academic advising and assistance with course selection, tutoring, career advising, assistance with educational and long-range planning, academic and cultural activities designed to enhance the student=s personal and intellectual development, and admission assistance for enrollment in graduate and professional programs.

The Center for Urban Education (UNI-CUE), located in the heart of the urban area of Waterloo, lowa, is the university's community connection. As one of the components of the university's Educational Opportunity Program and Special Community Services (EOP/SCS), it represents the university's strong commitment to cultural diversity.

UNI-CUE's mission is to provide a positive environment for lifetime learning. Individuals may pursue and continue their educational goals and prepare for careers. UNI-CUE staff collaborates with other campus departments and community programs to match the center's resources with community needs. UNI-CUE fully embraces the concept of continuing and part-time education.

The UNI-CUE facility houses a variety of programs including Educational Talent Search ( $6^{\boldsymbol{\omega}}$ - $12^{\text {h }}$ grade), Upward Bound (high school students), Educational Opportunity Center ( 19 years and up), and university courses for credit through continuing education. Meeting the challenge of providing educational opportunities for people of all ages and races in a comfortable and confident learning situation, the center focuses on community needs. The various programs available benefit both the participants and university students who want to pursue selected educational experiences in an urban environment.

The many opportunities provided by UNI-CUE's wide scope of programs show that UNI-CUE is maintaining and enhancing the university's commitment to life-long learning.

Classic Upward Bound is a college preparatory program designed to empower program participants with the academic skills and motivation necessary for success in high school and ultimately college.

The program serves students from low-income first-generation families who demonstrate "potential for college" as measured by standardized tests, high school grades, and written recommendations from a school administrator, counselor, or teacher.

The Classic Upward Bound Program has two components: the academic year program and the summer enrichment program. During the academic year, the Classic Upward Bound Program serves 75 students. This component focuses around the after-school Supplemental

Instructional/Tutorials program in which students receive academic support services in their respective high schools. The academic year program also includes academic advising and counseling, career exploration, college tours, study skill development workshops, leadership conferences, and other activities.

During the summer component, the Classic Upward Bound Program serves 60 students. These students spend six weeks during the summer living in dorms housed on the UNI campus. Students attend enrichment courses in mathematics (algebra, pre-calculus), English (literature and composition), science (biology, physics), foreign language (Spanish, French), economics, and computer science. In addition to their course work, students participate in cultural enrichment activities.

After a Classic Upward Bound student successfully graduates from high school, the graduate is enrolled in college classes in UNI's summer session. All of these courses are transferable to the college or university that the student will attend in the fall. Participants are housed in dormitories with other UNI college students during the summer.

The Classic Upward Bound Program accepts applications from students who have completed eighth grade or are currently enrolled in ninth, tenth, or eleventh grades in a Waterloo or Cedar Falls school. Interested parents or students may receive applications by stopping by the office at 800 Sycamore Street, Waterloo. Parents or students may also obtain information by calling the Classic Upward Bound Program at 319-234-6819 or from their high school guidance office.

Upward Bound Math \& Science (UBMS) is an academic enrichment program for high school students with an emphasis on math and science. The UBMS Center encourages these students to enroll in a college or university and major in math and science. It has two components: the academic-year program and the summer program.

During the academic-year component, participants design, create, and implement a math or science project each semester with assistance from their mentor. The UBMS Center requires that participants select a mentor from their community who has a college degree and works in a math or science-related career. The students are required to meet with their selected mentor regularly. Students may participate in the program until graduation from high school.

During the summer component, students participate in a supervised six-week residential program on the UNI campus. The purpose of the summer session is to introduce students to the world of math and science through a non-traditional, experiential learning method in which the

major components of the math and science curriculum are laboratory based. The aim is to continue to spark students' interest and give them laboratory skills they may not experience in their high school courses. Students are required to take biology, chemistry, earth science, physics, integrated mathematics, computer programming, technical writing and/ or Spanish. In addition to classes, students are engaged in educational field trips and guest speakers from various math and scientific careers. Students also have opportunities to participate in a wide range of recreational activities.

The Upward Bound Math \& Science experience allows students to grow both educationally and personally. Participants are afforded an opportunity to live and study in a safe university environment over the summer. This allows participants to: 1) become better acquainted with a university, students, faculty, and facilities; 2) meet high school students with similar interests; 3 ) take advantage of educational opportunities that may not be available at their local high schools; and 4) be exposed to current technological trends in mathematics, sciences, computer science, and career opportunities while exploring opportunities for college.

The Upward Bound Math \& Science Center accepts applications from students from Iowa in ninth or tenth grades who are interested in math and science. Interested parents or students may receive applications by stopping by the office at 800 Sycamore Street, Waterloo. Parents or students may also obtain information by calling the Upward Bound Math \& Science Program at 319-234-6819 or from their high school guidance office.

Inquiries regarding specific Educational Opportunity Programs and Special Community Services should be made to one of the following:

## Educational Opportunity Programs \& Special Community Services

University of Northern Iowa
Room 1, Seerley Hall
Cedar Falls, IA 50614-0707
http://fp.uni.edu/eop/
Center for Academic Achievement
214 Student Services Center, UNI
Cedar Falls, IA 50614-0387
319-273-2346 fax 319-273-2982
http://fp.uni.edu/eop/CAA/frontdoor.html
Educational Opportunity Center
800 Sycamore Street
Waterloo, IA 50703
319-234-6819 fax 319-232-5039
http://fp. uni.edu/eop/eocindex.htm
Educational Talent Search
800 Sycamore Street
Waterloo, IA 50703
319-234-6819 fax 319-232-5039
http://fp.uni.edu/eop/ETS.html
GEAR UP Progran
800 Sycamore Street
Waterloo, IA 50703
319-234-6819 fax 319-232-5039

## McNair Scholars Program

214 Student Services Center, UNI
Cedar Falls, IA 50614-0388
319-273-2284 fax 319-232-5039
http://fp.uni.edu/eop/McNairindex.htrvl

## Student Support Services

214 Student Services Center, UNI
Cedar Falls, IA 50614-0387
319-273-2179 fax 319-273-2982
http://fp.uni.edu/eop/SSS.html

University of Northern lowa Center for Urban Education (UNI-CUE)
800 Sycamore Street
Waterloo, IA 50703
319-234-6819 fax 319-232-5039
http://jp. uni.edu/eop/unicue.htm

## Classic Upward Bound

800 Sycamore Street
Waterloo, IA 50703
319-234-6819 fax 319-232-5039
http://fp. univedu/eop/CUB.htm
Upward Bound Math \& Science
800 Sycamore Street
Waterloo, IA 50703
319-234-6819 fax 319-232-5039

## Military Science

203 West Gym, UNI
Cedar Falls, IA 50614-0142
319-273-6178 fax 319-273-6929

## Price Lahoratory School

Located on the north edge of the campus, Price Laboratory School serves as a direct experience laboratory for professional education programs of the university. The school provides an educational program for a diverse student body in pre-kindergarten through grade twelve, including special education.

In addition to its role as a teacher education laboratory, the laboratory school is widely recognized for its innovative and experimental programs, and for its work in research and curriculum development. The school is strongly committed to service to the elementary and secondary schools of the state, providing leadership through regularly-sponsored conferences, workshops, and publications, and through its heavy involvement in the UNI program of extension and consultant services. The laboratory school operates on an open-door policy; visitation and consultation are encouraged. For educational resources and additional information about Malcolm Price Laboratory School programs, visit the PLS Web site at www.pls. uni.edu. The Director of Price Laboratory School may be contacted at 319-273-6136.


## The Roy Eblen Speech and Hearing Clinic

This clinic offers speech and hearing services both to university students and others outside the university community. These clinical services form an integral part of the program of professional preparation in speech-language pathology. Majors in communicative disorders and speech-language pathology carry out clinical services under the supervision of the faculty and instructional staff in the Department of Communicative Disorders. Services offered include audiological evaluations, speech and language evaluations, and remediation for individuals of all ages with speech, language, and hearing problems.

For more information on the clinic visit www.uni.edu/comdis/ clinic.html or call 319-273-2542.

## UNI Child Development Center

Students, faculty, and staff of the university are eligible to enroll their children ages 6 weeks to 5 years in the UNI Child Development Center. Located on the lower level of the Price Laboratory School, the center is a licensed child care facility offering full-time care to a maximum of 53 children in four classrooms. The center operates on the university calendar, offering both academic year and summer programming.

The Child Development Center also serves as a field experience site for students in Early Childhood Education, as well as a model program for educators across the state. Certified teachers, assisted by university students, staff the multi-age classrooms. Innovative curriculum and research are additional goals of the center, as well as the development of teacher education curriculum and evaluation procedures.

An evening child care program is funded through a U.S. Department of Education grant. The program, located in the same classrooms as the day program, runs from 5:30-9:30 p.m., Monday through Thursday evenings during the academic year only. Child care for up to twenty children is provided on a sliding fee basis: for Pell-qualified student parents the child care is free; for other students, the cost is $\$ 2.50$ and up per hour.

For more information on either program, or to learn how to register your child, call the CDC at 319-273-2263. Or you may visit the CDC office located in Price Laboratory School, 1901 Campus Street, Cedar Falls.


## The Fine and Performing Arts at UN

## Facilities

## Department of Art

www.uni.edu/artdept/index.html

## Kamerick Art Building

The Kamerick Art Building, which houses all divisions of the Department of Art, was built in 1985. An award-winning structure that is based on an elegant modular plan, it is among the finest and most attractive art buildings in the country. Planned in consultation with one of the foremost authorities on health hazards in the arts, it is both functional and safe. Inside, more than 67,000 square feet is divided among studios, classrooms, administrative and faculty offices, Art Auditorium, Computer Lab, Visual Resources Center, Student Study Center, Art Store and the Gallery of Art. The building is connected to the Communication Arts Center and is in close proximity to the Strayer-Wood Theatre and Russell Music Hall. Together, these units define the geographic focus for the fine and performing arts on the UNI campus. The Kamerick Art Building also serves as the architectural end of the main east-west campus walk, terminating in the atrium of the building which leads to the bridge across Hudson Road to the UNI-Dome.

## UNI Art Gallery and UNI Permanent Art Collection www.uni.edu/artdept/OtherFeatures/gallery.html

On the first floor inside the Kamerick Art Building is the UNI Gallery of Art, a large professional exhibition space in which six to eight major art exhibitions and a number of smaller auxiliary shows are presented each year. Major attractions include the annual exhibition of work by art faculty in the fall semester and a competitive student exhibition in the spring. The gallery also oversees the UNI Permanent Art Collection, which includes works by such prominent artists as Berenice Abbott, Josef Albers, Eugéne Atget, Romare Bearden, John Buck, George Grosz, Philip Guston, Pablo Picasso, and Jerry Uelsmann. These collections are complemented by a number of sculptural works across campus by such notable sculptors as Dennis Oppenheim, Fletcher Benton, Walter Dusenberry, Dale Eldred and Roberta Lord, Janet Loftquist, and Cork Marcheschi. The UNI Gallery provides educational opportunities for students who would like to learn about arts administration and the operation of galleries through the university's Cooperative Education and Work Study Programs.

## Computer Lab

The Computer Lab is located on the second floor of Kamerick Art Building, adjacent to the graphic design studios. Used by students and faculty in the Department of Art, it offers a rich and impressive array of high tech equipment and software.

## Art Store

The Department of Art has its own in-house store in Kamerick Art Building for the convenience of faculty and students. Supplies are ordered for all classes so that students are able to easily access the materials they need for their courses at UNI.


## Department of Communication Studies

www.chfa.uni.edu/comstudy

## Lang Hall

UNI Interpreters Theatre in the newly renovated Lang Hall serves as both a teaching studio for performance studies classes and as a performance/rehearsal space for public performances based on social and cultural issues, oral histories, and traditional performances of literature. The 100 -seat flexible black-box style studio is equipped with full light and sound support.

## School of Music

## Russell Hall <br> www.uni.edu/music/web

Russell Hall has been the home of the School of Music since 1962. The building contains a 600 -seat auditorium, large choral and instrumental rehearsal halls, recording facilities, a music technology lab, a music education resource room, office space for music faculty and staff, and over 40 practice rooms. In spring of $\mathbf{2 0 0 0}$, the School of Music expanded into the Gallagher-Bluedorn Performing Arts Center, creating additional space for School of Music students, faculty, ensembles, and concert events. For more information go to www. uniedu/music.

## Department of Theatre

## The Strayer-Wood Theatre

Constructed in 1978, the Strayer-Wood Theatre was the first theatre built in lowa with public funds, acknowledging the state's responsibility to serve the campus and the community through the arts. The building features two fully-equipped theatre spaces: a 500 -seat convertible thrust/ proscenium theatre and a black box (see "The Bertha Martin Theatre" below) as well as support spaces, an alternative performance space, classrooms, and offices for the Department of Theatre and Theatre UNI. The university's student-performed plays, musicals, and operas occur in the Strayer-Wood.

## The Bertha Martin Theatre

A part of the Strayer-Wood complex, the Bertha Martin Theatre is a 125-seat flexible black-box style theatre with full light and sound support. Used primarily for public performances of plays and musicals, the theatre is also in heavy use as a rehearsal and training space for theatre classes. It was equipped and partially funded with a bequest from the students of Bertha Martin, the founder of the theatre program at the university.

## The Gallagher-Bluedorn Performing Arts Center

## www.uni.edu/gbpac

The $\$ 23$ million, 100,000 square foot complex, containing three state-of-the-art concert halls, seating 1600,300 , and 125 respectively, opened in April 2000. The premier arts center in Northeast lowa is home to UNI music ensembles, the Waterloo-Cedar Falls Symphony, and a major new visiting artist series featuring internationally-acclaimed music, theatre, and dance ensembles.

The Great Hall is an acoustically-excellent, multi-purpose performance hall seating 1600 .

Two additional performance spaces include the Davis Recital Hall, a 300-seat acoustically-excellent recital hall appropriate for concerts, lectures, and other presentations. Jebe Hall seats 125 for concerts and lectures and features a new 38 -rank pipe organ.

## Programs

## Department of Art

## www.uni.edu/artdept/index.html

Visiting Artists and Scholars Program. Each year, the Department of Art invites to the UNI campus a number of prominent artists, designers, art critics, and art historians for the purpose of lectures and workshops. Through seminars, receptions, and workshops, students have the opportunity to exchange ideas with these guests, with the purpose of learning directly about contemporary trends, critical issues, and career alternatives. Over the years, dozens of nationally-known figures have participated in the Visiting Artists and Scholars Program.

Annual High School Art Scholarship Day. Each year, the Department of Art has a number of full-time, four-year scholarships to award to high school graduates planning on attending UNI and majoring in Art. The scholarship portfolio reviews and applicant interviews take place early in April. High School Art Scholarship Day also includes tours of Kamerick Art Building, opportunities to meet the faculty, and the chance to view the UNI Student Art Exhibition. Lectures, demonstrations, and other special events provide a great deal of information about the programs and facilities of the Department of Art.

Student Exhibition Opportunities. Students are encouraged to exhibit their work in a variety of gallery spaces on campus, in addition to the UNI Gallery. These include: The Dean's Triangle, the gallery triangular area in the Communications Arts Center outside the office of the Dean of the College of Humanities and Fine Arts; the Maucker Union Exparsion Lobby; and the small experimental In Use Gallery in Kamerick Art Building. In addition, there are numerous exhibition cases on both floors of Kamerick Art Building for the exhibition of student work, as well as in the Student Study Center.

## Department of Communication Studies

www.chfa.uni.edu/comstudy

UNI Interpreters Theatre is a co-curricular program in the Department of Communication Studies that involves students from across campus. In this performance group, small-scale productions based on social and cultural issues, oral histories, and traditional performances of literature are created and performed. Some of the subjects covered in the past include eating disorders, children's literature, rural farm families, and romance readers. Students do not need to have prior performance experience to participate. For further information, contact Dr. Karen Mitchell in the Department of Communication Studies at 319-273-2640.

## School of Music

## www.uni.edu/music/web

Undergraduate Programs. The School of Music at UNI enrolls approximately 300 students in various degree programs. These students participate in a wide array of course offerings including music theory, music history, performing ensembles, and applied lessons. Undergraduate course programs include the core curriculum (Liberal Arts Core) plus courses specific to the selected major in music. These degree programs range from 120-149 credit hours for completion. Majors in Music: Bachelor of Arts; Bachelor of Music in Performance; Bachelor of Music in Composition-Theory; Bachelor of Music in Music Education (Choral/ General Emphasis); Bachelor of Music in Music Education (Instrumental Emphasis); Bachelor of Music in Music Education (Jazz Emphasis). Minors in Music: Music; Jazz Studies.

Graduate Programs. The UNI School of Music awards graduate degrees (Master of Arts and Master of Music) with seven areas of concentration. Each degree requires a minimum of 30 semester hours in graduate-level courses for degree completion. Majors in Music: Master of Arts; Master of Music in Performance; Master of Music in CompositionTheory; Master of Music in Music Education (on-campus program); Master of Music in Music Education (off-campus program); Master of Music in Music History; Master of Music in Conducting; Master of Music in Jazz Pedagogy; Master of Music in Piano Performance and Pedagogy.

## Department of Theatre

## www.uni.edu/theatre

In addition to a full curriculum of theatre classes, the Department of Theatre offers a full range of productions throughout the year. It normally produces drama, musicals, opera, theatre for young audiences, and original or experimental work.

Theatre UNI. The production arm of the Department of Theatre, Theatre UNI produces a fully mounted 4-6 show season of work featuring student performers and technicians in the Strayer-Wood Theatre.

UNI Lyric Theatre. A collaborative endeavor of the Department of Theatre and School of Music, UNI Lyric Theatre presents an opera or major musical production performed and built by students each year in the Strayer-Wood Theatre.

Sturgis Youth Theatre. A collaborative endeavor of the Department of Theatre and the Cedar Falls Community Theatre, this program seeks to provide theatre education classes to and in the community and produce high quality theatre by and for young audiences off-campus.


The Gallagher-Bluedorn Performing Arts Center

www.uni.edu/gbpac

Visiting Artists. Over 20 internationally-acclaimed artists are presented each season in UNI's Gallagher-Bluedorn Performing Arts Center. Spanning from Broadway to baroque to the blues, the center hosts performances as well as educational residencies, allowing UNI students to interact with world stars.

> Student Participation and Organizations in the Arts

## Department of Art

## www.uni.edu/artdept/index.html

All UNI students and staff are invited to participate in the programs of the UNI Gallery and the Visiting Artists and Scholars Lecture Program, which are free and open to the public. Students are also encouraged to enter the competitive student exhibition held in the gallery in the spring, at which a large number of merit and purchase awards are presented.

Arts UNI. All students are invited to join Arts UNI, the Department of Art student organization sponsored by the UNI student government, and open to all students interested in organizing art-related events at UNI.

SAEA. The Student Art Education Association allows Art Education majors in the Department of Art to interact with the Art Education faculty, the Iowa Art Education Association, and the parent National Art Education Association; allows networking with student teachers and alumni teaching in the field; and sponsors art education-related events at UNI.

## Department of Commumication Studies <br> www.chfa.uni.edu/comstudy

UN1 Performance Studies Program. All university students and staff are invited to attend public performances in the UNI Interpreters Theatre, free of charge. Participation in productions is open to all UNI students and community members. Auditions are held at various times throughout the academic year. Those interested in non-performance participation are also needed for technical support. For further information, contact Dr. Karen Mitchell in the Department of Communication Studies at 319-273-2640.

## School of Music <br> www.uni.edu/music/web

Many music organizations and ensembles are open to all students by audition or application. Participation by non-music majors is encouraged. Credit is available to all who participate. Among the groups offered are: VOCAL - Chamber Choir, Concert Chorale, UNI Lyric Theatre, UNI Singers, Varsity Men's Glee Club, Women's Chorus, Cantorei Singers, and Women's Unity Chorale; INSTRUMENTAL - Chamber Orchestra, Jazz Bands I, II, III, Panther Marching Band, Symphonic Band, Symphony Orchestra, and Wind Symphony; SPECIALTY GROUPS - Chamber Winds, Horn Choir, Jazz Combos, Northern Iowa Flute Choir, Percussion Ensemble, String Chamber Music, UNITUBA Ensemble, and West African Drum Ensemble. For additional information visit www.uni.edu/ music.

## Department of Theatre

## www.uni.edu/theatre

All university students and staff are invited to attend the productions in the Strayer-Wood and Bertha Martin Theatres at a nominal charge for tickets. Various ticket packages and season subscription arrangements are available at the beginning of the academic year. Theatre productions are often used in other university classes as experiential learning opportunities.

All productions of Theatre UNI and UNI Lyric Theatre are open to participation by any enrolled UNI student. Auditions are held early in the semester or at times publicized on the theatre Web site (www.uni.edu/ theatre) and in the campus press. Students interested in non-performance participation can make a contribution in scenery and properties construction, costume and wardrobe, makeup and hair, lights and audio production, front of house, and stage management by contacting the theatre office 319-273-6386 or the production's director.

UNISTA. The UNI Student Theatre Association is housed within the Department of Theatre and is composed of any students involved in theatrical production on campus; they need not be theatre majors or minors. It functions as an independent production organization that produces several small budget plays or musicals each year in the Strayer-Wood Theatre or other venues around the campus on an application basis.

Theta Alpha Phi. A National Honorary Fraternity for students participating in theatre at UNI. This organization performs service projects around the community and hosts an annual awards and honors banquet commemorating the previous year's season.

## The Gallagher-Bluedorn Performing Arts Center

## www.uni.edu/gbpac

The new GBPAC hosts over 20 internationally-acclaimed artists each year, offering a culturally-diverse palette of dance, theatre, jazz, classical, world music, spanning from STOMP and Penn \& Teller to the Moscow Ballet in its 1600 -seat main hall. Discounted tickets are available to UN1 students. In addition, many visiting artists participate in educational residencies, interacting with UNI students in workshops and master classes. The center also provides experiential learning opportunities for UNI students in marketing, ticketing, stage production, and in-house management. For more information call 319-273-3660.

# Community Participation and Organizations in the Arts 

Department of Art www.uni.edu/artdept/index.html

The Department of Art takes its role very seriously as a proponent of the arts within the community. To this end, the department actively interacts with community, statewide, and professional organizations, including the organization and presentation of a visiting artists and scholars lecture series that is free and open to both the university and the general communities; the presentation of joint projects and exhibitions between the UNI Gallery of Art and community organizations such as the Hearst Center for the Arts and the Waterloo Museum of Art; and faculty involvement in the organization of projects for community art organizations. In addition, faculty often serve as active members on boards, committees, and panels of local, state, and national professional organizations.

## School of Music <br> www.uni.edu/music/web

UNI Suzuki Program. The UNI Suzuki School, founded by Martha Holvik in 1976, offers individual and group lessons in violin, viola, cello,

and flute (based on the Suzuki philosophy) to 190 northeast Iowa students age 3 to 18 . In addition, the school includes a clarinet class based on the Kinder-Klari method, several levels of theory classes, small ensemble sessions, and participation with visiting artists to the university community. The school provides annual individual/group recitals and outreach performance opportunities. It also sponsors an advanced violin performance group "Fiddlesticks", the Northern Iowa Junior Orchestra (area string students in grades 6-8), and the Northern Iowa Youth Orchestra (area string students in grades 9-12). The school is also part of a collaborative effort with the Center City for the Arts in Waterloo to bring quality violin instruction to students in the urban neighborhood. This project is called Music Works and provides year-round scholarships and instruments to these youths. There are opportunities for UNI students to teach and observe.

UNI New Horizons Band. Started January of 1999, this group gives an opportunity for those 50 years of age or older to take group lessons and play in band. This includes beginners, those who may have previously played or those who currently play a band instrument. There are opportunities for UNI students to be involved in teaching group lessons to members.

Northern lowa Children's Choir (NICC). The NICC was formed in January of 1997 in order to provide an additional choral experience for the students in the Cedar Valley area, to offer opportunities for the music education majors at UNI to work with children in a choral setting, and to serve as a model for teaching, conducting, and management for all UNI students. The members of NICC represent 30 different schools and range in age from those entering grade four to those completing grade eight. These students have been accepted into the choir through audition.

For more information about these community groups click on "Ensembles" at the Music home page www.uni.edu/music.

## Department of Theatre

www.uni.edu/theatre
S.T.A.G.E., Inc. UNI's oldest community support organization and one of the nation's first community support organizations for an academic theatre program, was founded in 1978 as a way for the local community to recognize and support the contributions made by the theatre and its programs. It has supported visiting artists, scholarships, and theatre trips to London, Minneapolis, and Chicago. Over the years, it has provided volunteers, works of art for the theatres, and generous hospitality to the theatre's patrons.

## The Gallagher-Bluedorn Performing Arts Center

www.uni.edu/gbpac
Friends of the Gallagher-Bluedorn. As the largest performing arts center in Northeast Iowa, the GBPAC offers students, faculty, and community residents the opportunity to support programming and educational programs with membership in the Friends of the GallagherBluedorn organization.

GBPAC Advisory Board. The GBPAC is made up of an advisory board consisting of representatives from the community, UNI students, and faculty.

The University of Northern Iowa offers degrees at both the undergraduate and graduate levels. The graduate program is given in detail on pages 137 to 183. At the undergraduate level, the University of Northern Iowa offers four traditional baccalaureate degrees: the Bachelor of Arts, the Bachelor of Fine Arts, the Bachelor of Music, and the Bachelor of Science. The external degree of Bachelor of Liberal Studies is also offered by UNI, and details of this unique degree program are given on pages 48-49. Major goals in the programs leading to these degrees are the advancement of humane learning and the preparation of all students to cope intelligently, effectively, and reasonably with the complex and changing conditions of life in modern society. To attain these goals, while at the university, students are expected to make significant progress toward:

1. understanding themselves and the society in which they live,
2. developing the ability to read, write, and speak their own language well and to appreciate its literature;
3. gaining an acquaintance with the literature of another language and the culture of its people, preferably in the original, but certainly through the study of translations,
4. securing a thorough grounding in the history and cultural traditions of the modern world with a special sympathetic understanding for the economic, social, and political problems of our time,
5. acquiring an understanding of the principles and methods of the natural sciences and mathematics and the part they play in modern society,
6. developing the ability to perceive the values of the arts and derive an enjoyment from them,
7. acquiring a knowledge of how to care for their own health and physical environment and to take an intelligent interest in the health and welfare of the community in which they live, and
8. growing in the desire to secure knowledge.

To achieve these ends, students are obliged to take a variety of courses drawn from among the arts, humanities, philosophy, mathematics, and language, and from among the biological, physical, and social sciences. Concentration in a major field enables students to engage in intensive study, to think for themselves, and to exercise discriminating judgment. It prepares the student for more advanced work if $s(h e)$ decides to go on to graduate school, or for immediate employment. This emphasis on the academic program is not to exclude the contributions made by other parts of the university life to the substantial development of a student's personality - social and athletic activities, public speaking and dramatic arts, music, art, public affairs, or other programs.

The desired result of these degree programs is not an individual who conforms to society as it is or sees her/his own vocation within the narrow confines of the day-to-day occupation, but rather a person enriched in mind and spirit and so stimulated that this person will seek with eagerness to contribute to the benefit of the world in which $s(h e)$ lives. Such a program is desirable for all students whatever their future professions may be.

All credit hours stated in this catalog, for a program, assume students have appropriate preparatory course work. If a student's preparation is inadequate, additional course work may be necessary and may extend the length of the program and the time required to complete graduation requirements.

For those who plan to become teachers, additional work is required in professional education. This work seeks to enhance the student's interest in and commitment to teaching, to instill loyalty toward the profession, and to encourage the desire for continuous professional growth. The student acquires the skills, techniques, and understanding necessary to good teaching by studying current knowledge concerning the physical, emotional, and mental growth of children and youth, the ways that they learn, and methods for guiding them to reach full potential. As part of her/his preparation, the student explores the mutual relationships
and responsibilities of the teacher, the school, and the community.
The prospective teacher must also spend a significant part of her/ his time in the area of learning chosen for concentration. The student's mastery of the subject matter of this area, its closely-related fields, and the skills and professional dispositions needed to present it effectively are essential aspects of successful teaching.

The teacher preparation program requires more hours to complete than many of the other programs in order to include the necessary professional work and to approximate, as far as possible in a four-year period, the other major goals previously listed. Students completing the teacher preparation program are strongly encouraged to continue their education beyond the bachelor's degree.

## UNI Plan of Study (POS)

## www.uni.edu/pos

The University of Northern Iowa's Plan of Study (POS) project has been a two-phased approach over the last several years, and serves as a planning and advising support system for students and advisors.

Phase I, implemented in Fall 1998, brought the degree audit to the web, providing access to this official advising document to undergraduate students and advisors. Major and minor worksheets for both teaching and non-teaching were also published online during Phase I.

Phase II was implemented in Fall 2003 with the Plan of Study application. The Plan of Study (POS) has been created to help undergraduate students better plan their overall educational experience and to help students graduate as efficiently as possible. The POS is an electronic planning tool to help students think ahead through their entire program and should help students make strategic decisions about the courses they take and when they take them.

## UNI Grad Pact - Four-Year Graduation

The University of Northern Iowa, in response to a student body that is diverse in experiences, talents, expectations, and goals, has developed a "pact" that is designed to assist students in completing an undergraduate degree within four calendar years of their initial freshman enrollment. Students may follow many paths to graduation, with dozens of majors and concentrations offered through five undergraduate colleges. In addition, special programs can be tailored to the needs and interests students bring to the campus or discover once they are here. Students who wish to participate in the four-year graduation plan must average from 16 to 18 credits per semester (one quarter of the applicable credits for their major each year) and will need to make academic and personal choices that will result in graduation within four years.

UNI's four-year graduation plan is called UNI Grad Pact. Students who enroll as freshmen with well-defined interests, in "pact-approved" majors, and who want to complete their undergraduate study as expeditiously as possible, are assured of being able to enroll in courses allowing graduation in four calendar years. UNI Grad Pact is an agreement between the university and those students who choose to participate in the plan.

Students accept responsibility for monitoring their own progress toward degrees and for making choices that will allow them to graduate within four calendar years. The university is responsible for maintaining systems of advising so that students can track their progress, and agrees to provide the needed courses or their equivalents.


The university continues to encourage breadth and exploration as essential parts of a university education. UNI Grad Pact is designed to assure that students are carefully guided in their course choices while still benefiting from the rich educational opportunities offered by the university. Those students who conclude that UNI Grad Pact does not meet their academic and/or personal goals are encouraged to develop, in consultation with their academic advisor, a plan and timetable for completing the courses in their major that will allow them to achieve their individual academic, career, professional, and personal aspirations. Those students who do not participate in the plan will still benefit from descriptions of recommended patterns of progress toward degrees and enhanced advising services that will be available to all students.

## General Conditions

1. Students must enter the university as freshmen with appropriate high school preparation to begin a four-year graduation plan.
2. Students must sign up for UNI Grad Pact and declare their interest in a major that qualifies for the four-year plan.
3. Students are responsible for meeting deadlines and requirements of the pact. Therefore, students must regularly monitor their progress toward graduation. Such monitoring includes meeting each semester, in a timely manner prior to registration, with their academic advisor.
4. For courses required by the major and for graduation, students must accept any available section that can be accommodated in their course schedule and must register at their assigned registration time.
5. Students must be admitted and remain in good academic standing to the colleges and departments which offer their major.
6. Students may change majors and remain in the program if, at the time the student decides to make the change, he or she can still meet the requirements of the new major and graduate within the four calendar years. Students may enroll in an additional major or in programs leading to additional licensing and certification, and remain in UNI Grad Pact, if they can complete these additional requirements and those of their first major within the four calendar years. Students must see their academic advisor in a timely manner in order to accomplish these changes or additions.
7. Students must accept responsibility for timely annual application for all necessary financial assistance.
8. Students must complete a minimum of one quarter of the applicable credits for their major each year (including summer sessions).
9. If, after working with their advisor, it appears that graduation may be delayed due to unavailability of a course, students must notify
the Office of the Provost, Associate Provost for Academic Affairs, in writing prior to the beginning of classes in the term in which the course would be needed.
If the student meets all the conditions of the four-year plan but is unable to graduate due to the unavailability of a course, the university will offer one of the following:
A. Allow the student to graduate in four years by substituting a different course or an independent study assignment, as determined by the department and the college offering the student's major.
B. Allow the student to graduate in four years by waiving the requirement to be met by the unavailable course, as determined by the department and college offering the student's major.
C. Allow the unavailability of a course to delay the student from graduating in four years, in which case the university will waive UNI tuition and mandatory fees for this course in order for the student to graduate within the next year.
These procedures will be the exclusive remedy for the four-year plan (UNI Grad Pact) agreement. The university is under no obligation to provide one of these adjustments unless the student submits a written request for an accommodation to the Provost prior to the beginning of classes in the last term of the student's four-year plan.

## Undergraduate Curricula Bachelor of Arts Degree

Two programs leading to the Bachelor of Arts degree are available.
A. Bachelor of Arts - Teaching Program - 130 semester hours

Note: Programs requiring more than 130 semester hours (see major requirements) are identified as extended and may include up to 152 semester hours.
On this program students are prepared as:

1. Secondary teachers of art, business, biology, chemistry, communications, earth science, geography, English, foreign languages, health, industrial arts, mathematics, modern languages, music, physical education, physics, science, social science subjects (economics, history, etc.), and speech.
2. Special teachers of art, industrial arts, music, physical education, special education, and speech.
3. Early childhood and elementary teachers (kindergarten through sixth grade).
4. Middle level education teachers in various areas of instruction.
B. Bachelor of Arts - $\mathbf{1 2 0}$ semester hours

On this program students are prepared in the following areas:

1. Liberal Arts - accounting, art, biology, business, chemistry, communications, computer science, criminology, design, family and consumer sciences, economics, English, finance, geology, health, industrial technology, leisure services, management, marketing, mathematics, modern languages, music, philosophy, physical education, physics, psychology, speech, social science, social work, science, and theatre.
2. Program for Registered Nurses.

A student certified or licensed as a registered nurse (R.N.) may be recommended for a Bachelor of Arts degree with a major in General Studies in accordance with the following provisions:
a. A student who has taken the work required for certification or licensure, including the successful completion of required agency examinations, will have 34-45 semester hours accepted for transfer to apply on the bachelor's degree. Such work may have been earned in a two-year associate degree program or in an approved hospital diploma program.

These hours of transfer work may be affected by a general university requirement that a maximum of 65 semester hours may be accepted from a two-year institution. The 34-45 semester hours of transfer credit for R.N. certification is considered part of this limit. Thus, a student who has earned more than 20 semester hours of other two-year college credit may not be able to use all of the nursing credits for graduation requirements. Such individuals should consult the Director of Admissions concerning the application of this requirement in her/his situation.
b. Eleven of the total number of semester hours accepted as advanced standing for R.N. certification are applied to Liberal Arts Core requirements in the areas of biology, chemistry, and interpersonal relationships. Specifically, the 11 hours would be dispersed in the following way:
Category 4. Natural Science and Technology
(a) Life Sciences - 3 hrs.
(b) Physical Sciences - 3 hrs .

Category 5. Social Science
(a) Group A (1 course) - 2-3 hrs.
(b) Group B ( 1 course) - 2-3 hrs.

One course from Group A, B, or C is required.
The student will be held to courses required in the remaining Liberal Arts Core categories.
c. The student shall complete a minimum of 15 hours of 100 -level courses from each of two of the five colleges for a total of 30 hours. The student's program will be planned in consultation with the Individual Studies Program Coordinator.
d. As an alternative to item " c ", the student may complete the requirements for a major offered by any department and graduate with a Bachelor of Arts in the chosen major.
e. A student may not earn duplicate credit for courses taken at another institution and judged to be equivalent.
f. The student shall earn enough credit in elective courses to have a total of 120 hours of academic credit.
g. This program is under the jurisdiction and general supervision of Individual Studies. Students entering this program will confer with the Program Coordinator.

This degree program is not recommended for students intending to work in nursing education at the collegiate level, in such areas as public health, or psychiatric nursing, nor those for whom the primary intention is graduate work in nursing.

## 3. Joint Program

Students interested in one of the following professional programs may complete the basic work on the University of Northern Iowa campus and transfer to UNI a year's credit from the professional school to complete the requirements for a Bachelor of Arts degree at UNI:

Chiropractic
Cytotechnology
Dentistry
Medicine
Medical Technology
Optometry
Physician Assistant
Pharmacy
Physical Therapy
Podiatry
Veterinary

A student shall complete at UNI all the requirements in the Liberal Arts Core ( 45 semester hours) and the requirements for the B.A. (Joint Program Option) in Biology and have a total of at least 92 semester hours at UNI. The professional courses transferred must bring the total hours to at least 120 semester hours. Credit is accepted only from professional schools which are fully accredited. Details of the B.A. (Joint Program Option) are available from the Biology Department.

The student must know the requirements for entrance to the professional school so as to be able to take at the University of Northern lowa the work required for admission while at the same time meeting UNI degree requirements. The student will work with the Biology Department advisor who will help in the selection of proper courses.

Acceptance of credit from professional schools of chiropractic, cytotechnology, dentistry, medicine, optometry, osteopathy, pharmacy, physician assistant, physical therapy, podiatry, and veterinary medicine toward meeting part of degree requirements:

A student who has completed three years or more of college work with a minimum of 92 semester hours, of which at least the last 30 hours of work were completed at the University of Northern Iowa before admission to an accredited professional college, may-use professional credit to satisfy the remaining hours required for the baccalaureate degree at the University of Northern lowa. The student shall have completed all of the specific requirements for the B.A. (Joint Program Option).

## C. Other Programs

## 1. Pre-professional.

Suggested programs are available for those planning to complete programs in dentistry, engineering, law, medicine, osteopathy, and podiatry. These program guides may be requested from the Admissions Office.
2. Physics/Engineering Dual-Degree Program.

Qualified students may pursue a dual-degree program leading to a B.S. Applied Physics degree from the University of Northern lowa and a B.S. Engineering degree from Iowa State University or the University of lowa. For details, please refer to the section of this catalog under Physics, Bachelor of Science Degree Programs, Applied Physics/Engineering Dual-Degree Major, on page 118.
3. Cooperative Programs.
a. Cooperative Nursing Program with Allen College. The University of Northern Iowa offers the Liberal Arts Core component of the Bachelor of Science in Nursing Degree offered by Allen College.
b. Three-year Program in Medical Technology. The University of Northern lowa cooperates with St. Luke's Hospital in Cedar Rapids and University of Iowa Medical School in Iowa City, to offer the first three years of work; St. Luke's Hospital in Cedar Rapids and University of Iowa Medical School in lowa City offer the fourth year.
c. Three-year Program in Cytotechnology. The Univer-

- sity of Northern Iowa cooperates with Mayo School of Health-Related Sciences, Rochester, Minnesota; School of Cytotechnology, Wisconsin State Laboratory of Hygiene, Madison, Wisconsin; and Mercy School of Cytotechnology, Des Moines, lowa. The first three years of work are done at UNI; during the fourth year, cytotechnology will be taken at one of the three cooperating schools.
d Three-year program in chiropractic medicine with Logan College of Chiropractic, Chesterfield, MO. The first three
years of work are done at UNI; during the fourth year, chiropractic classes will be taken at the cooperating school.

A student who expects to transfer to another institution should declare her/his special interest at the time of admission. The student will be assigned to an advisor who is familiar with the type of program being sought. Before seeing her/his advisor for the first time, the student should secure a current copy of the catalog of the school to which the transfer is planned.
4. Community College Partnerships. The A.A. Degree from all lowa community colleges fulfills the majority of the Liberal Arts requirements at UNI. In addition, other partnerships, also known as articulation agreements, have been developed between UNI and all Iowa community colleges for some UNI baccalaureate degree programs. These agreements show specific courses that need to be taken at each school to complete a program. If available, an articulation agreement typically results in the quickest route to graduation for a transfer student.

These partnerships are often known as $2+2$ programs, although the time to complete a degree may take more than four years depending on individual circumstances. Contact the Admissions Office at UNI to find out if an agreement is available in a specific area of interest.

In certain instances, the UNI portion of a $2+2$ program is offered at community college. For example, several B.A. degree programs are offered on the Des Moines Area Community College campus in Carroll, Iowa for students who are place bound or career changing. These include B.A. degrees in elementary education teaching, early' childhood education endorsement, and technology management/general business.

When offered on-site, the second two years are taught by UNI faculty through a mix of delivery systems including onsite classes, classes over the lowa Communication Network, or Web-based course work. All $2+2$ programs offer the same classes as programs offered on the UNI campus.

For more information contact the UNI Admissions Office, Gilchrist 120, Cedar Falls, IA; phone 319-273-2281.
5. Army Reserve Officers' Training Corps (ROTC)
a. The Four-Year Program. The Army ROTC Four-Year Program consists of two parts: the Basic Course and the Advanced Course.

The Basic Course is usually taken during the freshman and sophomore years. Students taking a Basic Course class do not incur a military service obligation (except for scholarship students). The Basic Course teaches the student leadership, oral and written communication skills, survival skills, and basic soldier skills. There is no prerequisite that the basic courses be taken in sequence; however, a student must complete the basic course or the equivalent (see paragraph $\mathbf{b}$. below), before progressing into the advanced course.

The Advanced Course is usually taken during the junior and senior years. Students enrolled and contracted in the Advanced Course will incur a military obligation (either active or reserve). The Advanced Course teaches the student about small unit tactics, leadership, ethics, management of military organizations and resources, as well as military law. The Department of the Army will pay all contracted cadets up to $\$ 3,600$ a year during the last two years of the program.
b. Accelerated Program. The accelerated program is de-
signed specifically to fill the needs of the students who did not take Army ROTC during the first two years. Placement credit for the basic course may be obtained in several ways. The most common methods are prior military service, enlisted basic training, or successful completion of a sixweek summer ROTC basic camp.
c. The Simultaneous Membership Program. The Simultaneous Membership Program (SMP) allows contracted cadets to be members of the Iowa Army National Guard or the Army Reserve and Army ROTC simultaneously.

ROTC SMP cadets are paid at the rate of a Sergeant (E-5) for their one weekend a month training assemblies, plus up to $\$ 3,600$ a year subsistence allowance from the ROTC Advanced Course, and New G.I. Bill educational assistance benefits. Many ROTC SMP cadets also qualify for the Student Loan Repayment Program.
d. ROTC Scholarships. U.S. Army ROTC three- and fouryear scholarships are available. They cover up to $\$ 5,000$ per year toward tuition and required educational fees at UNI, and provide $\$ 300$ per semester for textbooks, supplies, and equipment.

Army ROTC scholarships also provide a subsistence allowance of up to $\$ 3,600$ for each school year that the scholarships are in effect. Winning and accepting an ROTC scholarship does not preclude accepting other scholarships. Additional ROTC scholarship information is contained on pages 21-22.
e. Military Science Minor. The Military Science Department offers a minor in Military Science. Requirements for the minor are 24-30 hours and include Military Science courses as well as elective courses. More information is contained on page 110.
f. Additional Information. Additional information regarding the U.S. Army ROTC program is contained under the section titled Military Science, on page 109 . The specific courses offered by the Department of Military Science are listed under the Department of Military Science on page 186. For additional information, write to the University of Northern lowa, Department of Military Science, Cedar Falls, IA 50614-0142; come in person to West Gym (Room 203), UNI campus; or call the student advisor at 319-273-6178 or 319-273-6337. Please visit our Web site www. uni.edu/armyrotc.

## Bachelor of Arts - Liberal Arts Curricula



Not later than the beginning of the sophomore year, each student enrolled in this program will choose one major from the list below. A knowledge of a foreign language is required or recommended for several majors. Specific information regarding the foreign language requirements will be found with the departmental listings. It is recommended that the student include in her/his electives a course in the literature of some language or Janguages other than English (in translation if not in the original).

## Majors and Minors

Specifit requirements for the various majors and minors will be found with the departmental listings.

## Majors

Accounting
American Studies
Anthropology
Art
Asian Studies
Athletic Training
Biology
Biology. Ecology and Systematics Emphasis
Biology: Biomedical Emphasis
Biology: Microbiology Emphasis
Biotechnology
Chemistry
Chemistry-Marketing
Communication
Communication/Electronic Media
Communication/Public Relations
Communicative Disorders
Computer Information Systems
Computer Science
Criminology
Earth Science
Earth Science: Interpretive Naturalist
Emphasis
Economics
English
European Studies
Family Services
Finance
French
General Studies
General Studies for Registered Nurses
Geography
Geography: Environmental Emphasis
Geology
Geology. Environmental Science
Emphasis
German

## Minors

Accounting
Accounting-Business
American Ethnic Studies
Anthropology
Art
Asian Studies
Astronomy
Biology
Business Communication
Chemistry
Coaching
Communication
Communication/Journalism
Communication/Public Relations
Comparative Literature
Computer Information Systems

Graphic Communications
Health Promotion
History
Humanities
Individual Studies
Inter-American Studies
Interior Design
Leisure Services
Management
Management Information Systems
Marketing
Mathematics
Mathematics-Applied
Mathematics-Statistics and
Actuarial Science
Modern Languages Dual Major
Music
Philosophy
Physical Education
Physics
Political Communication
Political Science
Psychology
Public Administration
Real Estate
Russian
Russian and East European Studies
Social Work
Sociology
Spanish
Study of Religion
Teaching English to Speakers of Other
Languages (TESOL)
Technology Education and Training
Technology Management
Textile and Apparel (TAPP)
Theatre

[^0]Political Science
Politics and Law
Portuguese
Psychology
Real Estate
Real Estate—Business
Religion
Russian
Russian and East European Studies
Sociology
Spanish
Speech-Language-Hearing Sciences
Statistics and Actuarial Science
Teaching English to Speakers of Other
Languages (TESOL)
Technology Management
Textile and Apparel
Theatre
Women's Studies
Writing
Youth Services Administration

## Bachelor of Arts - Teaching Program Curricula

All candidates on this program will choose one of the following patterns not later than the beginning of the sophomore year.
A. Preparation for teaching in the secondary school or in special subjects.

Semester Hours
Liberal Arts Core
Minimum 45
Professional Education Requirement ......................................... 32
Major, minor, electives............................................................... 53
B. Preparation for teaching in the elementary school (kindergarten and grades 1-6).

Semester Hours
Liberal Arts Core................................................................................ 45
Professional Education Requirement ......................................... 33
Major requirements ......................................................................-31-33
Concentration area and electives ....................................................24-29
130-140
C. Preparation for teaching in early childhood education (pre-K through grade 3).

Semester Hours
Liberal Arts Core Minimum 45
Professional Education Requirement ......................................... 33
Major requirements.......................................................................... 37
Other requirements and electives ............................................... 1515

## Professional Education Requirements

All candidates for the Bachelor of Arts-Teaching Program are required to take the courses in professional education and a minimum of one departmental methods course. In addition, all candidates must be admitted to the Teacher Education Program. Admission procedures are initiated at a required orientation session during Level I of the Professional Education sequence.

## Semester Hours

220:150 Meeting the Needs of Diverse Learners in Classrooms. .2
240:020 Educational Media or
240:031 Educational Media and Classroom Computing......2-3
280:070 Human Relations: Awareness and Applications ......... 3 (Before enrolling in 280:070, the student must be fully admitted to the Teacher Education Program.)

## Level I

200:017
Field Experience: Exploring Teaching........................ 1
Dynamics of Human Development. .3

## Level II

(Before enrolling in Level II, the student must be fully admitted to the Teacher Education Program.)
200:128 Field Experience: Teacher as a Change Agent
200:148 Learning and Instruction in Classroom Contexts...... 3
250:150 Classroom Evaluation Instruments.............................. 2
Level III
(Before enrolling in Level III, the student must be fully admitted to the Teacher Education Program.)
260:119 Schools and American Society .3
Student Teaching
(Before enrolling in Student Teaching, the student must be fully admitted to the Teacher Education Program.)
280:1xx Student Teaching (course number denotes area in which experience is gained: 280:132, 134, 135, 137, 138, 139, 140, 250)


## Professional Education Waivers/ Substitutions

1. Industrial Technology majors will be waived from 240:020. A student changing to a different education major from Industrial Technology would be required to complete 240:020.
2. Physical Education majors may substitute $420: 174$ for $250: 150$. A Physical Education major changing to a different education major from Physical Education would be required to complete 250:150.
3. Physical Education majors will be waived from 220:150. A student changing to a different education major from Physical Education would be required to complete 220:150.
4. Music Education majors will be waived from 250:150. A student changing to a different education major from Music Education would be required to complete $250: 150$.
5. Music Education majors will be waived from 240:020. A student changing to a different education major from Music Education would be required to complete 240:020.
6. Art Education majors will be waived from 240:020. A student changing to a different education major from Art Education would be required to complete 240:020.
7. Secondary science teaching majors (Science Education, Biology, Chemistry, Earth Science, and Physics) will be waived from 240:020. A student changing to a different education major from Science Education, Biology, Chemistry, Earth Science, and Physics would be required to complete 240:020.

## Admission to the Teacher Education Program

Application for Admission to the Teacher Education Program must be made before enrolling in the Level II courses. At that time the student must also fulfill any additional requirements as prescribed by the Council on Teacher Education.

To be admitted to the Teacher Education Program, a student must:
a. declare a major;
b. have earned at least 24 semester hours of credit;
c. have earned at least a $\mathbf{2 . 5 0}$ grade index in all course work;
d. file an acceptable Application for Admission to Teacher Education in 159A Schindler Education Center;
e. have successfully completed the speech and hearing evaluation;
f. have successfully completed College Reading and Writing ( $620: 005$ ) or the equivalent;
g. have successfully completed Oral Communication (48C:001) or the equivalent;
h. have passed the required basic skills test.

In approving admission, the university gives special consideration to the scholarship, health, character, personality, and leadership potential of the applicant for a teaching curriculum. All requirements for full admission are to be completed by the start of Level II.

Information concerning fee payments for tests, registration procedures, and test dates are available by contacting Academic Services, 125 East Bartlett Hall, UNI, 319-273-6023 or the Director of Teacher Education, 159A Schindler Education Center, UNI, 319-273-2265.

## Field and Clinical Experiences

At the University of Northern lowa experiences in teaching and the observation of teaching are an integral part of the teacher education curriculum. The emphasis on experimentation and creative approaches gives the student insight into turning theory into practice. The professional laboratory experiences include field experiences and participation, with supervised observations, that culminate in the actual period of student teaching in the senior year.

Supervised observations give the student an opportunity to see the teaching-learning operation without becoming involved in the on-going activity itself. In the field experience and participation experiences, the student takes an active part under direction and guidance in the teaching-
learning situation or other community activities.
Student involvement in all of the field and clinical experiences in teacher education is vital to the preparation of the prospective teacher. Observation and participation experiences are provided through specific courses in the Professional Education Program and through individual departments offering teaching majors. These experiences give the student the background needed to make professional course work and student teaching more meaningful.

## Student Teaching

Student teaching is a period of guided teaching which is a full semester in length. During this time, the student assumes increasing responsibility for the teaching-learning activities in the classroom. The student receives twelve (12) semester hours of credit for student teaching, evaluated on a credit/no-credit/withdrawal system. Interinstitutional student teachers who enroll at UNI, including those on the Regents' Universities Student Exchange Program, may be evaluated on a graded basis (e.g., A, B, C, D, F) upon written request at the time of application from the Registrar of the home institution.

To be admitted to student teaching, a student must demonstrate:
a. FULL admission to the teacher education program;
b. a cumulative GPA of $\mathbf{2 . 5 0}$ or higher on work at all colleges and universities;
c. UNI GPA of 2.50 or higher;
d. 2.50 GPA in the academic major or department approval;
e. GPA of $\mathbf{2 . 5 0}$ or higher in courses completed in the Professional Educetion Program;
f. completion of all methods courses listed as prerequisites for student teaching with a grade of C ( 2.00 ) or higher as well as other departmental requirements.
g. Mathematics majors are required to have a major GPA of 2.25 or higher AND departmental approval; and
h. Health Education and Physical Education majors and minors are required to have current First Aid and CPR certification prior to student teaching.
Final student teacher assignment is based upon fulfillment of all established requirements and availability of placement.

## Exit Requirements

To be recommended for teaching licensure in lowa, a student who graduates from the UNI Teacher Education Program must satisfactorily complete the major and/or minor and the teacher education requirements, have an overall GPA of 2.50 and a cumulative UNI GPA of $\mathbf{2 . 5 0}$, submit fingerprint and waiver cards for mandated background checks, and pass additional exit requirements as may be prescribed by the Council on Teacher Education. A student not meeting these requirements may graduate but will not receive recommendation for licensure.

Exit tests may be prescribed by the Council on Teacher Education, the College of Education, or the Iowa Board of Educational Examiners. (The National Teacher Examination, as well as the Pre-Professional Skills Tests, PPST, are now required to be taken by teacher education graduates to meet licensure requirements in some states. Neither is required in the State of lowa.) Information concerning fee payments for tests, registration procedures, and test dates are available by contacting Academic Services, 125 East Bartlett Hall, UNI 319-273-6023.

For additional information on teacher licensure, see pages 53-54.

## Majors and Minors - Teaching

Elementary majors may choose either a university-approved endorsement minor or a 24-hour area of concentration (see pages 80-81 for
possible choices).
Each student preparing to teach in the secondary school or in a special subject will choose a major not later than the beginning of the sophomore year. The student will also select at least one minor if a minor requirement is indicated under the description of the chosen major. Even if not required, a student may select a second major or one or more minors.

Approved majors and minors will be chosen from the fields listed below,

## Majors

All Science
Anthropology
Art Education
Biology
Business
Chemistry
Communication-Theatre
Early Childhood Education
Earth Science
Elementary Education
English
French
Geography
German
Healch Education
History

## Minors

Anthropology
Art
Art (K-6)
Basic Science (K-6)
Biology
Business
Chemistry
Communication-Theatre
Early Childhood Special Education
Earth Science (K-6)
Economics
Elementary School Media Specialist
(K-6)
English
French
Geography
German
Healch Education
History
History (K-6)

## Mathematics

Middle Level Education Dual Major
Middle/Junior High School Science
Modern Languages Dual Major
Physical Education
Physics
Political Science
Psychology
Social Science
Sociology
Spanish
Teaching English to Speakers of Other
Languages (TESOL)
Technology Education and Training
TESOL/Modern Language

Library Media Specialist
Literacy Education
Mathematics
Mathematics (K-6)
Modern Languages (K-6)
Physical Education-Elementary Teaching
Physics
Political Science
Portuguese
Psychology
Russian
Severe Disabilities
Social Studies (K-6)
Sociology
Spanish
Special Education
Teaching English to Speakers of Other
Languages (TESOL)
Technology Education and Training

## Bachelor of Fine Arts Degree

The program available under this degree is a major in Art, with an emphasis in any one of eight studio areas, offered by the Department of Art. A minimum total of 130 semester hours is required for the degree. The B.F.A. degree program is designed to provide professional career training in the following studio emphases: ceramics, drawing, graphic design, jewelry/metals, painting, photography, printmaking, and sculpture.

## Bachelor of Fine Arts Degree Curricula

Candidates for the Bachelor of Fine Arts degree will complete the following pattern of work:

Art Major Semester Hours
Liberal Arts Core...................................................................................... 45
Major Requirements ..................................................................... 77
General Electives........................................................................... 8

The Bachelor of Fine Arts degree is generally recognized as the professional undergraduate degree in the visual arts. Students are required to pass a portfolio review before they are formally admitted to the Bachelor of Fine Arts Program in the Department of Art. Candidates for this degree are also required to present an exhibition of their creative works demonstrating competency in the studio arts in their senior year. (See Department of Art, page 66, for detailed information about this program.)

The Bachelor of Fine Arts degree in Art does not provide for licensure to teach; additional hours are necessary to meet licensure requirements.

## Major

Art: Studio Emphasis

## Bachelor of Music Degree

Majors in this degree program have the choice of an educational major or two professional majors. The Music Education major carries licensure to teach music in grades K-6 and 7-12. The Performance major with emphases in voice, piano, organ, and band-orchestral instruments, and the Composition-Theory major are professional programs designed to prepare students for careers as artists-performers or composers, or for entrance to graduate schools where further excellence in a performance area might be pursued. Students earning the Bachelor of Music degree are prepared as performers, college teachers, and in all areas where a high degree of music or performing skill is required.

## Bachelor of Music Degree Curricula

All candidates for the Bachelor of Music degree will complete a pattern similar to the following:

Semester Hours
Liberal Arts Core. .42
Music requirements (applied, theory, history and literature, conducting, ensembles, recital, .composition, electives) 66-82
 130*
The following majors are offered on this degree program:
Composition-Theory - 82 hours
Music Education (teaching) - 66, 67, or 77 hours
Performance (voice, piano, organ, band-orchestral instruments) - 80 hours
*Music Education majors must also complete the Professional Education Requirements (see page 46). The minimum semester-hour requirements vary with the specialization chosen. The Music Education major carries licensure to teach in grades K-6 and 7-12. (A course in human relations is also required for licensure to teach.)

The approval of the faculty, and the Associate Director of the School of Music must be secured before a student is admitted formally to this degree program. All students who have been admitted to the school and wish to pursue a music major curriculum must undertake a common core of required courses during the freshman year. During.the second
semester of the freshman year, an extensive evaluation of each music major will be conducted. In addition to the entrance audition required of all students who intend to major in music, transfer students are required to take a placement exam in music theory or start with level 1 in Theory, Aural Training, and Sight Singing. The music faculty will evaluate the performance in these areas to determine School of Music admissibility for each transfer student.

Participation in a performance organization such as band, chorus, orchestra, and other ensembles, is required of all degree students every semester in residence.
(See the School of Music, page 114, for additional information.)

## Majors

Composition-Theory
Music Education
Performance

## Bachelor of Science Degree Curricula

The Bachelor of Science degree should be elected by those students who are preparing for careers in areas where effective application of knowledge and training requires a higher degree of concentration in subject matter and cognate areas, particularly in advanced-level course work. This degree is especially appropriate for students planning postbaccalaureate study in graduate or professional schools.

Requirements include:

1. a minimum of 56 hours in the subject and cognate areas with:
a. at least 36 hours in the subject area;
b. at least one 100 -level course in cognate areas;
2. the completion of undergraduate research or internship carrying 12 semester hours of credit applicable to either the subject or cognate area(s). This project should result in the completion of a written report. The major department must certify to the Registrar that the research requirement has been met before the degree is granted;
3. the completion of the Liberal Arts Core requirements selected from courses included in the six Liberal Arts Core categories.
Since this degree assumes a higher degree of concentration in subject matter, a major leading to this degree will ordinarily require at least eight 100 -level semester hours of credit more than an identically-named major leading to a Bachelor of Arts degree, and a minimum of 126 semester hours.

## Majors

Applied Physics
Biology
Bioinformatics
Chemistry
Computer Science
Construction Management
Electrical and Information Engineering Technology (EIET)
Geology
Manufacturing Technology
Networking and System Administration
Physics

## Bachelor of Liberal Studies Degree

The Bachelor of Liberal Studies (B.L.S.) program is offered by the three Iowa Regents' Universities: University of Northem Iowa, Iowa State University, and the University of Iowa. The purpose of the B.L.S. is to offer educational opportunities to those students who are unable to at-
tend college as full-time, on-campus students. Students may complete the degree at their own pace without attending on-campus courses. Students often use guided independent study and other distance learning opportunities to earn credit.

Admission to the Program. Each student entering the program must have earned:

1. an Associate of Arts degree from an accredited, two-year college, or at least 62 semester hours of college credit acceptable toward graduation at UNI;
2. a minimum 2.00 grade point average.

Total Credit Requirements. A total of at least 120 semester hours of credit, including transferable credit earned, is required for graduation. The total must fulfill the following specifications:

1. 45 semester hours of credit earned at four-year colleges in courses defined as "upper-level" at the colleges in which courses are taken. At the University of Northern lowa, upper-level courses are those numbered 100 and above;
2. at least 30 hours of credit earned in the junior and/or senior years in courses at UNI. This total may include nonresidence credit.
Liberal Arts Core Requirements. Students must meet the basic undergraduate core requirements as specified and determined by the policies of the degree-granting institution.

Program Distribution Requirements. To insure sufficient breadth of study, each student's program must include, in addition to the credit used to fulfill the Liberal Arts Core requirements previously stated, a minimum of 12 semester hours of credit in each of the three (3) areas selected from the following list. Of the total 36 semester hours of credit applied to fulfill this requirement, 24 semester hours must be in upper-level credits as defined by the institution in which the courses are taken, with at least 6 semester hours of upper-level credits in each of the three areas chosen.
a) Humanities
b) Communications and Arts
c) Natural Sciences and Mathematics
d) Social Sciences
e) Professional fields (such as business, design, family and consumer sciences, social work, and education)
Information and details regarding admission to the B.L.S. program, evaluation of prior academic work, program advising, and declaration of major may be obtained from Continuing Education Credit Programs, at the corner of 27th Street and Hudson Road, Cedar Falls, IA 506140223. Students may also call the B.L.S. advisor at 1-800-648-3864 or 319-273-7740. Students are also encouraged to visit the B.L.S. Web site www. uni.edu/contined/gis/bls/bachelor.shtml.

## Change of Degree Program

Students who change from one degree program to another will be held for all specific requirements of the program on which they expect to graduate. There will be little difficulty in making such a change if it is made not later than the beginning of the junior year. However, if the change is made later than that, there is no assurance that the student will be able to complete the work required for graduation within a four-year period.

## Liberal Arts Core

As stated in the University of Northern Iowa mission statement, the university's undergraduate programs are founded on a strong liberal arts curriculum. The liberal arts experience in the Liberal Arts Core exposes students to the broad areas of knowiedge embodied in the whole of the environment and liberates students to further develop the knowledge, skills, and values necessary to live thoughtful, creative, and productive lives. The American Association of Colleges and Universities' "Statement
on Liberal Learning ${ }^{n}$ reflects the purposes of UNI's Liberal Arts Core:
A truly liberal education is one that prepares us to live responsible, productive, and creative lives in a dramatically changing world. It is an education that fosters a well-grounded intellectual resilience, a disposition toward lifelong learning, and an acceptance of responsibility for the ethical consequences of our ideas and actions. Liberal education requires that we understand the foundations of knowledge and inquiry about nature, culture and society; that we master core skills of perception, analysis, and expression; that we cultivate a respect for truth; that we recognize the importance of historical and cultural context; and that we explore connections among formal learning, citizenship, and service to our communities.

We experience the benefits of liberal learning by pursuing intellectual work that is honest, challenging, and significant, and by preparing ourselves to use knowledge and power in responsible ways. Liberal learning is not confined to particular fields of study. What matters in liberal education is substantial content, rigorous methodology and an active engagement with the societal, ethical, and practical implications of our learning. The spirit and value of liberal learning are equally relevant to all forms of higher education and to all students.

Because liberal learning aims to free us from the constraints of ignorance, sectarianism, and short-sightedness, it prizes curiosity and seeks to expand the boundaries of human knowledge. By its nature, therefore, liberal learning is global and pluralistic. It embraces the diversity of ideas and experiences that characterize the social, natural, and intellectual world. To acknowledge such diversity in all its forms is both an intellectual commitment and a social responsibility, for nothing less will equip us to understand our world and to pursue fruitful lives.

The ability to think, to learn, and to express oneself both rigorously and creatively, the capacity to understand ideas and issues in context, the commitment to live in society, and the yearning for truth are fundamental features of our humanity. In centering education upon these qualities, liberal learning is society's best investment in our shared future.
(The Association of American Colleges and Universities' "Statement on Liberal Learning," 1999)

## Requirements of the Liberal Arts Core*:

## Summary:

| Category 1: | Core Competencies | 12 hours* |
| :--- | :--- | ---: |
| Category 2: | Civilizations and Cultures | 9 hours |
| Category 3: | Fine Arts, Literature, Philosophy |  |
|  | and Religion | 6 hours |
| Category 4: | Natural Science and Technology | 7 hours |
| Category 5: | Social Science | 9 hours |
| Category 6: | Capstone Experience | $\underline{2 h o u r s}$ |

## Total Program Minimum

*For students admitted to UNI prior to Fall 1994, the Speaking and Listening course included in the Core Competencies category is not required.

Courses numbered 000-099 are open primarily to freshmen and sophomores. Courses numbered 100-199 are open primarily to juniors and seniors.

## Courses:

## Category 1: Core Competencies

12 hours*
Courses in written and oral communication enhance students' abilities to read and listen critically and to write and speak effectively by attention to how the gathering, analyzing, and presenting of evidence and conclusions can be designed for specific purposes and audiences. Courses in quantitative techniques enhance students' abilities to use quantitative data effectively and to apply relevant mathematical and statistical concepts and methods to diverse problems and situations. Personal wellness promotes the acquisition of knowledge and the development of skills and attitudes necessary for implementing positive health-related decisions.
A. Reading and Writing (3 hours required)*

620:005 College Reading and Writing ( 3 hrs .)
620:015 Exposition and Report Writing ( 3 hrs.)
620:034 Critical Writing About Literature (3 hrs.)
B. Speaking and Listening ( 3 hours required)** 48C:001 Oral Communication (3 hrs.)
C. Quantitative Techniques and Understanding ( 3 hours required)***
800:023 Mathematics in Decision Making (3 hrs.)
800:060 Calculus I ( 4 hrs .)
800:072 Introduction to Statistical Methods (3 hrs.) 800:092 Introduction to Mathematical Modeling ( 3 hrs .)
D. Personal Wellness (3 hours required)

440:010 Personal Wellness (3 hrs.)

## Category 2: Civilizations and Cultures

9 hours
Courses in this category promote an understanding of Western and non-Western cultures and civilizations from ancient times to the present through historical accounts, literatures, philosophies, religions, and fine arts. Using methods of critical inquiry, students explore aspects of human nature, the shaping of thoughts and values, and their interrelations.
A. Humanities ( 6 hours required)

680:021 Humanities I: The Ancient, Classical, and Medieval Worlds ( 3 hrs .)
680:022 Humanities II: The Renaissance, Reformation, and Enlightenment ( 3 hrs .)
680:023 Humanities III: The Age of Revolution to the Present ( 3 hrs .)
B. Non-Western Cultures (3 hours required)

680:121 Russia/Soviet Union (3 hrs.)
680:122 Japan (3 hrs.)
680:123 Latin America (3 hrs.)
680:124 China ( 3 hrs .)
680:125 India (3 hrs.)
680:127 Middle East (3 hrs.)
680:128 Africa (3 hrs.)
680:132/990:132 Native North America (3 hrs.)
680:137/990:137 Native Central and South America ( 3 hrs .)

## Category 3: Fine Arts, Literature, Philosophy and Religion

6 hours
Courses in this category explore diverse forms of human expression and enhance understanding of how religious, philosophical, literary, and aesthetic ideas and experiences shape and reflect cultures and common patterns of human life. Students will develop knowledge of the complex interplay of culture, history, and human experience through critical examination of ideas and beliefs, ritual and symbol, moral codes and social values, story and poetry, visual art, music, theater, and dance.

## A. Fine Arts ( 3 hours required)*

420:034 Survey of Dance History ( 3 hrs .)
490:002 The Theatrical Arts and Society ( 3 hrs .)
520:020 Our Musical Heritage (3 hrs.)
520:030 Music of Our Time ( 3 hrs .)
600:002 Visual Inventions (3 hrs.)
600:004 Visual Perceptions ( 3 hrs .)
*590:011 may substitute for the Fine Arts requirement for all music majors.
B. Literature, Philosophy, or Religion (3 hours required)

620:031 Introduction to Literature ( 3 hrs .)
640:024 Religions of the World ( 3 hrs .)
650:021 Philosophy: Basic Questions ( 3 hrs .)
720:031 Introduction to Francophone Literature in Translation ( 3 hrs.)
740:031 Introduction to German Literature in Translation ( 3 hrs .)
770:031 Introduction to Russian Literature in Translation ( 3 hrs .)
790:031 Introduction to Portuguese and Hispanic Literatures in Translation (3 hrs.)

## Category 4: Natural Science and Technology

7 hours
Courses in natural science promote an understanding of science as a human process that investigates matter and energy acting within complex organic and inorganic systems. Fundamental principles of both physical and life sciences are included.

Students are required to take a course with a scheduled laboratory from either Life Sciences or Physical Sciences or another laboratory course offered by the College of Natural Sciences. Only 6 hours are required for students who meet the Liberal Arts Core laboratory requirement with a course other than one listed in Life or Physical Sciences.

## A. Life Sciences (3 or 4 hours required)

For all courses listed under Life Sciences and Physical Sciences, with the exception of $990: 010$, a student must have satisfied university entrance requirements in English and Mathematics. (College of Natural Science majors may meet the Life Sciences requirement by completing 840:051 or 840:052.) 820:032* Inquiry into Life Science ( 4 hrs .)
840:012 Life: The Natural World ( 3 hrs .)
840:013* Life: The Natural World - Lab ( 1 hr .)
840:014 Life: Continuity and Change ( 3 hrs .)
840:015* Life: Continuity and Change - Lab (1 hr.)
990:010 Human Origins (3 hrs.)

* Lab Course
B. Physical Sciences (3 or $\mathbf{4}$ hours required)

For all courses listed under Life Sciences and Physical Sciences, with the exception of $990: 010$, a student must have satisfied university entrance requirements in English and Mathematics. (College of Natural Sciences majors may meet the Physical Sciences requirement by completing 860:044, 860: $070,880: 054$, or $880: 130$. Design, Family and Consumer Sciences majors may meet the Physical Sciences requirement by completing 860:044 or 860:061.)
820:031* Inquiry into Physical Science (4 hrs.)
860:010** Principles of Chemistry (3-4 hrs.)
860:011 Molecules and Life ( 3 hrs .)
870:010**Astronomy (3-4 hrs.)
870:021 Elements of Weather (3 hrs.)
870:031* Physical Geology (4 hrs.)
880:011* Conceptual Physics (4 hrs.)
880:012 Physics in Everyday Life (3 hrs.)
970:026** Physical Geography (3-4 hrs.)

* Lab Course
** Lab Course if 4-hour option elected


## Category 5: Social Science

9 hours
Courses in this category introduce students to the description and analysis of human behavior from different perspectives, ranging from the societal and cultural to the institutional, individual, and topical viewpoints. Students are exposed to the diversity of sociocultural systems created by human beings during their evolutionary development, and examine the manner in which behavior is influenced by environmental, sociocultural, psychological, and historical processes.

Required: one course from group $A$, one course from group $B$, and one course from group A, B, or C. (Students cannot count both 970:010 and 970:040 toward the Liberal Arts Core.)
A. Group A Sociocultural and Historical Perspectives

900:023 American Civilization (3 hrs.)
970:010 Human Geography ( 3 hrs.)
970:040 World Geography ( 3 hrs .)
980:001 Introduction to Sociology ( 3 hrs .)
990:011 Culture, Nature, and Society ( 3 hrs.)
B. Group B Individual and Institutional Perspectives

31F:010 Human Identity and Relationships ( 3 hrs .)
400:001 Introduction to Psychology ( 3 hrs.)
920:024* Introduction to Economics (3 hrs.)
942:014 Introduction to American Politics ( 3 hrs .)
943:024 International Relations (3 hrs.)
*Satisfactory completion of both 920:053 and 920:054 by all nonbusiness majors and Business teaching majors, through UNI or transfer, may substitute for 920:024.
C. Group C Topical Perspectives

450:041/900:041 Social Welfare: A World View ( 3 hrs .)
450:045/900:045/980:045 American Racial and Ethnic Minorities ( 3 hrs .)
900:020 Women, Men, and Society ( 3 hrs .)
900:080 Conflict and Social Reconstruction ( 3 hrs .)
900:085 The Nature of Social Issues ( 3 hrs .)
900:090 Children and Youth: Issues and Controversies ( 3 hrs .)
940:020 Contemporary Political Problems ( 3 hrs .)
980:060 Social Problems ( 3 hrs .)

## Category 6: Capstone Experience

2 hours
Capstone courses provide opportunities for students to synthesize the diverse realms of thought they have studied and to apply the intellectual proficiencies they have acquired. The emphasis is on cultivating life-long learning through linking theory and academic preparation to practical problem-solving activities in multidisciplinary seminars or community-based learning courses.

Prerequisite: junior or senior standing.
Capstone courses are designated in each Schedule of Classes.

## TOTAL 45 hours

*620:005 recommended for students with ACT English and Reading scores of 18-26;
620:015 has prerequisite of combined ACT English and Reading scores of 54 or higher;
620:034 recommended for English majors and minors with prerequisite of ACT English and Reading scores of 54 or higher.
**For students admitted to UNI prior to Fall 1994, the Speech and Listening course included in the Communication Essentials category is not required.
***Students with Math ACT scores that are 26 or higher will be placed in 800:060 or 800:072 or 800:092 as follows:

Those with four years of college prep math with a grade of $B$ or higher in the senior-level course will be placed in either 800:060 or 800: 092. Those not satisfying these criteria will be placed in 800:072.

Liberal Arts Core courses included in major or minor program requirements are distinguished by italics.

## Administrative Policies:

1. Liberal Arts Core courses may be used to satisfy requirements for both the Liberal Arts Core and the major, minor, and program emphases.
2. Departments offering a Liberal Arts Core course may preclude their major or minor students from taking that particular course to satisfy the requirements for the Liberal Arts Core, the major, or the minor.
3. Liberal Arts Core requirements can be met through CLEP examinations, departmental examinations, and the Advanced Placement Program of the College Entrance Examination Board. A student who receives CLEP credit in both the physical and biological sciences shall be considered to have fulfilled the laboratory requirement.
4. No Liberal Arts Core course may be taken for graduate credit.
5. No Liberal Arts Core course may have a non-Liberal Arts Core course as a prerequisite.
6. All courses taken to meet Liberal Arts Core requirements must be taken for graded credit.
7. The Associate of Arts degree from Iowa community colleges shall continue to be accepted, according to an approved articulation agreement, to meet most Liberal Arts Core requirements.
8. The Liberal Arts Core requirements apply to all undergraduate degree programs.
9. Regents Articulation Agreement:

The University of Northern Iowa, the College of Liberal Arts at the University of Iowa, and the College of Liberal Arts and Sciences at Iowa State University agree to accept fulfillment of the Liberal Arts Core at any one of them as equivalent to completion of Liberal Arts Core requirements at another, with the following stipulations:
a. This agreement does not apply to those students who transfer without having fully completed the Liberal Arts Core prior to transfer.
b. Validation of fulfillment of Liberal Arts Core requirements requires that a student transferring must have met the transfer requirements of the receiving institution with respect to semester hours and grade point average.
c. When a foreign language proficiency, a capstone course, and/or a course in foreign culture is requirtd, whether within or in addition to the Liberal Arts Core, a student may meet this requirement at either institution regardless of the institution whose Liberal Arts Core requirements the student fulfills.
d. Liberal Arts Core validation is the responsibility of the student transferring and will be completed upon request to the Registrar of the institution from which the student is transferring.

## Program Certificates

The University of Northern Iowa makes available, in addition to traditional programs, the opportunity for students to earn program certificates. Program certificates provide an alternative to programs leading to a degree, a major, or a minor; they certify that an individual has completed a program approved by the university. For further information concerning requirements for these certificates see pages 129-136, or consult with the department listed or the Office of the Registrar, which serves as the centralized registry. Some of the certificates are interdisciplinary and involve several departments; however, only one department has been listed as the contact.

Program certificates now available include:
Department of Communication Studies
Certificate in Public Speaking
Graduate Certificate in Corporate Communication
Department of Computer Science
Computer Applications Certificate
Department of Design, Family and Consumer Sciences
Certificate Program in Long Term Care
Gerontology Program Certificate
Department of Educational Leadership, Counseling, and Postsecondary Education
Advanced Studies Certificate in Educational Leadership Emphasis: Principalship
Emphasis: Superintendency Preparation Program
Department of Geography
Certificate in Cartography and Geographic Information Systems (GIS)
School of Health, Physical Education, and Leisure Services
Certificate in Global Health/Culturally Competent Health Care
Environmental Health Certificate
Outdoor Recreation Certificate
School-Age Care Leadership Certificate
Tourism Certificate
Youth Agency Administration Program Certificate
Youth Development in Religious Settings Certificate (jointly offered by Departments of HPELS and Philosophy and Religion)
Department of History
Certificate in Public History -
Department of Industrial Technology
Technology Management Certificate
Department of Management
Training and Development in Business Certificate
Department of Marketing
Certificate in Entrepreneurship
Certificate in Marketing Research and Consulting
Department of Modern Languages
Certificate in French Language Studies
Certificate in German Language Studies
Certificate in Hispanic and Portuguese Studies
Certificate in Portuguese Studies
Certificate in Russian Language Studies
Certificate in Spanish Language Studies
Certificate in Spanish For Special Purposes
International Commerce Certificate
Certificate in Translation (in French, German, Portuguese, Russian, or Spanish)
School of Music
Artist Diploma (I)
Artist Diploma (II)

## Department of Philosophy and Religion

Youth Development in Religious Settings Certificate (jointly offered by Departments of Philosophy and Religion and HPELS)
Department of Psychology
Industrial and Organizational Psychology Certificate
Department of Social Work
Social Work Certificate
Substance Abuse Counseling Certificate
Department of Sociology, Anthropology, and Crimiaology
Certificate in Criminology
Skills in Social Research Certificate
College of Business Administration
Certificate in International Business

## College of Humanities and Fine Arts

Certificate in Leadership Foundations College of Social and Behavioral Sciences Conflict Resolution Certificate

## Requirements for Graduation

In addition to the completion of one of the baccalaureate degree programs, there are other specific requirements for graduation which apply to all undergraduate students seeking any bachelor's degree, other than the Bachelor of Liberal Studies. These are listed below, See pages 143-145, 176-177, 178-180 and 182-183 for graduation requirements for a graduate degree program.
A. Residence

1. Not more than 32 semester hours earned in correspondence (specified as "Guided Independent Study" at UNI), extension, or television courses may be used toward graduation.
2. At least 36 weeks spent in residence at this university while earning in such residence at least 32 hours of credit, of which 20 hours must be earned in the junior and senior years.
3. At least 32 hours of credit earned in the junior and senior years in courses at this university. This total may include nonresidence credit.
4. The last semester or full summer session before graduation spent in residence at this university.
B. Scholarship
5. A student seeking the bachelor's degree with licensure to teach must successfully complete student teaching and achieve a cumulative grade index in all course work attempted, at this university and elsewhere, of at least 2.50 to be recommended for graduation. The student must also achieve a cumulative grade index of $\mathbf{2 . 5 0}$ on all work attempted at the University of Northern Iowa.
6. A student seeking the bachelor's degree (without licensure) must achieve a cumulative grade index in all work attempted, at this university and elsewhere, of at least 2.00 to be recommended for graduation; the student must also achieve a cumulative grade index of 2.00 on all work attempted at the University of Northern Iowa.
Note: A student may be held by her/his academic department to specific grade point requirements, for the major work and/or graduation, which are higher than the grade point requirements for all university students. Students are advised to refer to the section of this "Programs and Courses" that lists the specific major.

## C. Communication

Competence in reading, speaking, and writing is required of all candidates seeking degrees or university recommendations for licensure. All students who enter UNI with or after the Fall 1988 semester who are candidates for baccalaureate degrees are required to demonstrate competence in writing by passing the Liberal Arts Core writing course and meeting the writing requirements for their academic major.
D. Foreign Language Competency Requirement .

Students entering UNI who graduated from high school in 1989 or thereafter are required to demonstrate a level of competence in a foreign language (classical or modern) equivalent to that achieved after the second semester at the college level. One year of foreign language in high school is considered to be equivalent to one semester of foreign language at the university.

The foreign language competency requirement can be satisfied in the following ways:

1. satisfactory* completion of two years of high school study in one foreign language;
2. satisfactory* completion of a combination of high school and college study in one language equivalent to the competence achieved after the second semester at the college level;
3. satisfactory performance in an achievement examination measuring proficiency equivalent to that attained after the second semester of college study in one foreign language.
4. satisfactory* completion of either two years of high school study or one year of college study or the combined equivalent in American Sign Language (ASL). Study in any other language and culture for the hearing impaired will not automatically satisfy this graduation requirement.
*Satisfactory completion means a minimum grade of ${ }^{\text {a }} \mathrm{C}$-" ${ }^{-1}$ in the last course taken to meet this requirement.

## E. Advanced Courses

At least 10 hours of work in a major in courses numbered 100-199 and taken at this university.

## F. Maximum Credit by Examination

A maximum of 32 semester hours of credit earned by examination or by open credit is applicable toward degree requirements. This includes credit earned by CLEP, by departmental examination, by Advanced Placement, and credit established by examination of other colleges and universities.

## G. Listing of Candidates for Graduation

A student may be listed as a candidate for graduation at the end of a semester if the completion of work for which $s(h e)$ is registered would meet all the requirements for graduation exclusive of grade points, and if the grade points to be earned do not exceed the number which could be earned for the hours for which the student is registered.

## H. Application for Graduation

A student who expects to be graduated at the end of a semester must make written application at the opening of the semester. This application is filed in the Office of the Registrar.

## I. Second Baccalaureate Degree

To receive a second baccalaureate degree, a student must meet all the requirements for the second degree, including at least 36 weeks in residence and earning not less than 32 hours of credit.

The university does not grant two degrees, one with a Teaching Program and one with a Liberal Arts Program, for the same basic hours of credit ( 130 hours). A student may have a double major, one in Teaching and one in Liberal Arts, but the Teaching major must be the first major and the degree granted on the teaching program since it has the higher hour and grade index requirement.

## Additional Requirements for the Baccalaureate Teaching Program

1. For the completion of any undergraduate curriculum the student - must earn a minimum of twelve (12) semester hours of credit in student teaching at this university, except that an undergraduate student with three (3) or more semester hours of credit in student teaching earned at the same level in another college or university may be released from four (4) hours of student teaching at this institution.
2. Not more than twelve (12) hours of credit in student teaching may be used toward the hours required for graduation.
3. One year in advance of the time a student plans to enroll in student teaching, $s$ (he) will be invited to attend a Student Teaching Roundup during which $s($ he $)$ will complete the necessary steps to apply to student teach and to receive a student teaching assignment. To be eligible for assignment to a student teaching placement, $s$ (he) must have completed the following requirements:
a. FULL admission to the teacher education program;
b. a cumulative GPA of 2.50 or higher on work at all colleges and universities;
c. a UNI GPA of 2.50 or higher;
d. a 2.50 GPA in the appropriate academic department or department approval;
e. a 2.50 or higher GPA in courses completed in the Professional Education Program; and
f. all methods courses listed as prerequisites for student teaching with a grade of " C " $(2.00)$ or higher as well as other departmental requirements.
g. Mathematics majors are required to have a major GPA of 2.25 or higher AND departmental approval; and
h. Health Education and Physical Education majors and minors are required to have current First Aid and CPR certification prior to student teaching.

## Teaching Licensure

Teaching licenses are issued by state departments of education and are valid only in the state of issue. A college or university recommendation is required for issuance of a license.

Students in the teaching program must meet requirements for an Iowa teaching license if they are to be recommended for licensure from the University of Northern lowa. At graduation they are eligible for the Initial License, valid for a period of two years for the kind of service indicated by the endorsement on the license; e.g., elementary and early childhood teaching, secondary teaching in content areas, or teaching in a special area such as art or music. The student usually can secure appropriate licensure in other states by making proper application and fulfilling any additional requirements.

In addition to holding a license valid for a specific teaching level, the secondary teacher must also have ENDORSEMENT in each subject to be taught. Endorsements are issued by the Iowa Department of Education on the recommendation of an institution. To secure the recommendation of the University of Northern Iowa, the student must meet the requirements for a teaching major or a teaching minor (or equivalent) in the subject. Exceptions are made only with the authorization of the university department offering the major or minor.

This university may recommend for licensure those graduates of other colleges or universities who have completed their professional work here. However, this is a discretionary matter and the university will expect such students to demonstrate excellence of scholarship and meet standards required of its own graduates. Such students must have earned
at least 20 hours of residence credit and at least 12 semester hours must be in the area for which endorsement is requested.

The State of Iowa requires an approved human relations component.

For additional information, contact the Office of the Registrar, 243 Gilchrist Hall, University of Northern Iowa, Cedar Falls, IA 50614-0006.

## Hours of Credit Needed to Renew or Reinstate a License

Renewal and reinstatement requirements are established by the Iowa State Board of Educational Examiners and are subject to change by that body at any time. The Bureau of Practitioner Preparation and Development of the Department of Education distributes information concerning all changes in licensure requirements to city superintendents and to the teacher-education institutions. Information concerning the renewal or reinstatement requirements may be obtained from the Registrar of the university or from:

Board of Educational Examiners
Grimes State Office Building
Des Moines, Iowa 50319-0146

## Graduate Curricula

The University of Northern Iowa offers twelve graduate degrees:
A. Master of Accounting - a minimum of 30 semester hours
B. Master of Arts - a minimum of 30 semester hours: Majors
Art
Biology
Chemistry
Communication Studies
Computer Science Education
Curriculum and Instruction: Instructional Technology
English
French
Geography
German
Health Education
History
Leisure Services-Youth and Human Services
Mathematics
Mathematics for the Middle Grades (4-8)
Mental Health Counseling
Music
Performance and Training Technology
Physical Education
Physics Education
Political Science
Psychology
School Library Media Studies
Science Education
Science Education for Elementary Schools (K-6)
Sociology
Spanish
Speech-Language Pathology
Teaching English to Speakers of Other Languages (TESOL)
Technology
TESOL/Modern Languages
Two Languages: French/German, Spanish/French, German/Spanish Women's Studies
C. Master of Arts in Education - a minimum of 30 semester hours. Majors
Curriculum and Instruction: Specialty Area Focus
Curriculum and Instruction: Early Childhood Education Curriculum and Instruction: Education of the Gifted Curriculum and Instruction: Elementary Education Curriculum and Instruction: Literacy Education Curriculum and Instruction: Middle Level Education
Educational Psychology
Educational Psychology: Professional Development for Teachers Postsecondary Education: Student Affairs
Principalship
School Counseling
Special Education
D. Master of Business Administration - a minimum of 31 semester hours.
E. Master of Music - a minimum of 30 semester hours. Majors
Composition
Conducting
Jazz Pedagogy
Music Education
Music History
Performance
Piano Performance and Pedagogy
F. Master of Public Policy - a minimum of 41-45 semester hours.
G. Master of Science - a minimum of 30 semester hours (some majors may be more)

## Majors

Athletic Training
Biology
Chemistry
Computer Science
Environmental Health
Environmental Science
Environmental Technology
H. Master of Social Work - a minimum of 38 or 60 semester hours
I. Specialist - a minimum of 30 semester hours beyond the master's degree.
Major
Science Education
J. Specialist in Education - a minimum of 30 semester hours beyond the master's degree.

## Major

School Psychology
K. Doctor of Education - a minfimum of 60 semester hours beyond the master's degree.
Intensive Study Areas
Curriculum and Instruction
Educational Leadership
Leisure, Youth and Human Services
Special Education
L. Doctor of Industrial Technology - a minimum of 64 semester
hours beyond the master's degree.

## Academic Requlations

## Academic Program: Student Load

The registration of every student is subject to the approval of her/his advisor.

The regular work of an undergraduate student for the fall or spring semester usually consists of 16 or 17 hours. First semester students are limited to a maximum of 18 hours.

Students may register for hours up to and including the limits indicated below without obtaining special permission:

Probation and Warning Students .14
All Other Undergraduates........o.o.o.......o...o.............................. 18
Graduate Students. . 15
Undergraduate students who wish to register for an overload must contact the Office of the Registrar for approval prior to registration.

The normal maximum undergraduate student load during the summer session is one semester hour per week of instruction. Undergraduate students who wish to register for an overload must seek approval through the Office of the Registrar.

Graduate students must submit a Student Request form to their advisor, which is forwarded to department heads and the Dean of the Graduate College. A 3.00 GPA or above at UNI will usually be required for consideration of an overload request.

The maximum graduate student load during each semester of the academic year is 15 hours. Persons employed full-time should not register for more than 6 hours of graduate credit in any semester of the academic year.

The normal maximum graduate student load during the eight-week summer session is 9 hours; that normally permitted during each fourweek split summer session is 4-5 hours.

Exceptions to load restrictions for graduate students may be granted only by the Graduate College.

## Classification of Students

Earned Semester Hours
Freshman less than 30
Sophomore 30-59
Junior...............................................................................................................

Full-time/Part-time Status

| Fall and Spring Semesters | Undergraduate <br> 12 or more hours | Graduate |
| :--- | ---: | ---: |
| Full-time | $9-11$ hours | $7-8$ hours |
| $3 / 4$ time | $6-8$ hours | $5-6$ hours |
| $1 / 2$ time | $1-5$ hours | $1-4$ hours |
| Less than $1 / 2$ time |  |  |
| Summer Session* | 9 hours | 7 hours |
| Full-time | $7-8$ hours | 6 hours |
| $3 / 4$ time | $5-6$ hours | $4-5$ hours |
| $1 / 2$ time | $1-4$ hours | $1-3$ hours |
| Less than $1 / 2$ time |  |  |

*The above specifications apply only to eight-week courses. For the specifications which apply to four- or six-week session courses or a combination, consult the Office of the Registrar.

## Declaration of Major

## Degree Audit/Advisement Report

The declaration of a major is made through the department offering the major. The choice of major should be made as early as possible in the student's university career, in order to complete the program and fulfill requirements for graduation. When the major is declared, the student is assigned an advisor in the major department and a Declaration of Curriculum with this information is filed by the student with the Office of the Registrar.

When students have declared a major, they are eligible for a Degree Audit/Advisement Report. This is prepared by the Office of the Registrar and made available to the student on their student portal. Degree audits are accessible via the web at www.uni.edu/pos/ or http://myuniverse.uni.edu.

## Change of Registration

Students may add classes, without approval, during the first seven (7) instructional class days of a semester. After the seventh instructional day of the semester and before the end of the third week of the semester, the student must have departmental approval to add a class. For the summer sessions a proportionately equal amount of time is allowed at the beginning of a session for adding classes.

Classes are rarely added after the third week of the term. To add a class for credit after the third week of a term, the student must have the approval of the instructor, the student's advisor, and the head of the department in which the course is offered. Courses dropped after the deadline for dropping with a $W$ (Withdrawn), which is 10 calendar days after the end of the first half of the fall and spring semesters and at the mid-point of half-semester and summer session courses, will be recorded as $F$ (Failed) unless there are unusual circumstances and the student is doing passing work - in which case the instructor, the student's advisor, and the head of the department in which the courses are offered may approve a grade of $W$.

Pertinent dates governing the dropping and adding of courses, change to or from ungraded credit, and deadlines for making changes without charge are contained in the Schedule of Classes for that particular session.


## Withdrawal Refunds or Fee Reduction

The information below applies to students who withdraw completely from school during a semester or summer session. Dropping one or more classes does not constitute a withdrawal unless students drop all classes for which they are registered.

If credit is earned during the period of enrollment, there is no refund or reduction of academic fees. For any two- or three-week session, there is no refund or reduction of academic fees. Room and board refunds are made according to agreement set out in the "Contract for Room and Board."

Academic fees for a student enrolled for a regular semester or summer session who withdraws from the university will be reduced by the percentage indicated in the table below, beginning with the date of formal withdrawal with the Registrar. The amount of reduction will vary from 90 to 25 percent. For summer sessions, reduction percentages are on a daycount basis. (Please see the Schedule of Classes for information pertaining to a particular semester or summer session.)

| Fall/Spring Semester |  |
| :---: | :---: |
| Percentage of fee <br> reduction | Withdrawal during <br> specified weelse |
| 100 | before classes begin |
| 90 | first week |
| 75 | second week |
| 50 | third week |
| 25 | fourth week |
| 0 | after fourth week |

## Summer Session

| Percentage of fee reduction |  | Withdrawal on day Number Withdrawal during specified class days |  |
| :---: | :---: | :---: | :---: |
|  | 8-week or longer sessions | 6-week sessions | 4-week sessions |
| 100 | before classes begin | before classes begin | before classes begin |
| 90 | 1-3 | 1-2 | 1-2 |
| 75 | 4-6 | 3-4 | 3 |
| 50 | 7-8 | 5-6 | 4 |
| 25 | 9-10 | 7-8 | 5 |
| 0 | $11^{\text {th }}$ day and beyond | 9th day and beyond | $6{ }^{\text {th }}$ day and beyond |

No refund for two- or three-week sessions.

## Withdrawal Procedure

A student who has started attending classes, and who finds it necessary to withdraw completely from school, initiates the withdrawal through the Office of the Registrar. Those students who live in residence halls must also cancel the housing contract through the hall coordinator of the residence hall in which they live. Those students receiving financial aid must contact the Financial Aid Office. Students who wish to drop one or more courses and yet remain enrolled should consult the section, "Change of Registration."

A student who has registered but decides not to come to the University of Northern lowa should advise the Office of the Registrar in writing at as early a date as possible of the need to cancel the registration, listing the reason(s) for withdrawing from the university. Withdrawal after classes begin will result in a tuition charge.

## Student Identification Card (uCard)

Each new student receives an identification card (uCard) which is used throughout attendance at the university. A fee of $\$ 20.00$ is charged to replace this uCard.

## Class Attendance

Students are expected to attend class, and the responsibility for attending class rests with the student.

Students are expected to learn and observe the attendance rules established by each instructor for each course.

Instructors will help students to make up work whenever the student has to be absent for good cause; this matter lies between the instructor and student.

Whenever possible, a student should notify the instructor in advance of circumstances which prevent class attendance.

Instructors will notify the Registrar in case a student's attendance is such that her/his membership in a class is in doubt.

## Policy on Make-up Work and Missed Classes

It is the expressed focus of the University of Northern Iowa to further the educational development of each of its students. On occasion events will necessitate a student=s absence from class. In order for both faculty and all students to effectively plan for these absences, the following procedures are recommended.

## Procedure:

1. All parties involved should be made aware of scheduled absences well ahead of the date(s) of absence. In the case of extra-curricular activities, a semester-long schedule should be prepared and distributed at the beginning of the semester. In instances where semesterlong schedules are not feasible, two-weeks written notification shall be given for all absences. This notification shall take place even if the absence is potential rather than definite. Assuming that appropriate notification has been provided, students and faculty shall mutually agree as to how assignments, lectures, exams, etc. shall be made up. The type and extent of make-up work shall be at the discretion of the faculty member.
2. Occasionally there will occur situations in which two weeks notice is impossible. On these occasions, students, faculty, and others concerned should work closely together to ascertain whether special arrangements can and/or should be made.
3. Faculty shall not penalize a student for missing a class or exam for an educationally-appropriate activity, including university-sponsored or -sanctioned events.
4. Where situations of irreconcilable disagreement occur which are not resolved at the department level, a panel comprised of the Vice President for Academic Affairs, or that officer's designee, the Department, Head of the academic department involved, and a representative of the extra-curricular program (where applicable) shall meet at their earliest convenience with the faculty member and the student to mediate the matter.
(Approved by the President's Cabinet April 23, 2001. Approved by Faculty Senate April 24, 2001.)

## Course Credit Expectation

An academic semester contains 15 weeks (approximately 75 days) of instruction. Students enrolled in courses whose mode of instruction is lectural/discussion-based should expect to have 15 hours of class contact over the length of the semester for each hour of credit available. Students enrolled in courses whose mode of instruction is activity-based should expect to have 30 hours of class contact over the length of the semester for each hour of credit available. Students enrolled in courses offered on a shorter-term basis should expect their class contact to be proportionately increased to be comparable with semester long course expectations.

## The Making Up of Incomplete Work

To receive credit for course work a student is required to be in attendance for the full semester. Exceptions to this rule are rarely made.

Work lost by late enrollment or by change of registration may be made up for credit by an undergraduate student with the consent of the Office of Academic Affairs. Graduate students must have the consent of the Dean of the Graduate College.

Work lost because of absence due to illness, or other extenuating circumstances, may be made up, but arrangements for making up work missed are made between the student and the instructor.

Work left incomplete at the end of a semester or summer session will be reported as $F$ (Failure) unless a report of $I$ (Incomplete) has been authorized by the instructor. The Incomplete is restricted to students doing satisfactory work in the class who, because of extenuating circumstances, are unable to complete the work of the course. The Incomplete is limited to assigned work during the final sixth of the term. If a course is reported as Incomplete, a student is not prevented from registering for another course for which the incomplete course is a prerequisite.

Undergraduate: Work reported as Incomplete for undergraduate students in the fall semester must be completed by July $1^{\text {a }}$ the next calendar year. Work reported Incomplete in the spring semester must be completed by December $1^{*}$. Work reported as Incomplete in the summer session must be completed by February $1^{* *}$ the next calendar year. The ex-

act length of time to remove the Incomplete within the above guidelines, is set by agreement between the instructor and the student. If the work reported as Incomplete is not made up by the deadline noted above, it is automatically entered as an $F$ (Failure) on the student's record. However, if for sufficient cause an Incomplete cannot be removed in the time allowed, a request for an extension of time may be made to the instructor of the course. The extension, if approved, is for a period of up to another six months as designated by the instructor.

Graduate: Work reported as I (Incomplete) in the fall session for graduate students must be completed by June ist the next calendar year. Work reported Incomplete in the spring and summer sessions must be completed by January 1st the next calendar year. The exact length of time to remove the Incomplete within the above guidelines, is set by agreement between the instructor and the student. If the work reported as Incomplete is not made up by the deadline noted above, it is automatically entered as an $F$ (Failure) on the student's record.

Any requests for an exception to the above guidelines for graduate students must be submitted in writing on a Student Request form and receive departmental and Graduate College approvals. Only under the most unusual circumstances would requests for additional time be approved.

Some courses continue beyond the normal ending date of the semester or session. In such cases, the initial grade reported will be an $R C$ which means Research or Course Continued. Once the extended instructional period is finished, the $R C$ grade will be replaced with the A-F grade assigned by the instructor.

## Regression

Regression occurs when a student enrolls in a course which has content fundamental to another course the student has previously completed successfully. When such regression occurs, the regressive course will be available on an ungraded (credit/no credit) basis only. Credit may be earned but the hours earned will increase the student's minimum degree hour requirement by an equal amount.

The decision as to whether a course is regressive is made by the department offering the courses. Regression does not occur when the more advanced course was failed. (Courses to which this policy applies will be identified in the Schedule of Classes.)

## Duplication

When two courses have content which is highly similar, e.g., onè for the liberal arts core and one for major/minor requirements, the department offering the course(s) will determine if degree credit can be earned in both courses. If the department will not allow degree credit in both courses, the credit in the course taken second will increase the student's minimum degree hour requirement by an equal amount. Such second courses may be completed only on an ungraded (credit/no credit) basis.

## Marks and Grade Points

The marks A, B, C, D, F (Failed), and I (Incomplete) are used in indicating quality of work. Courses dropped during the first one-sixth of the semester or summer session are not recorded on the student's record. Courses dropped during the second and third one-sixth of the term are indicated on the student's record by W (Withdrawn). For courses dropped during the final one-half of the term (the specific date of the last day to drop a course without an F is listed in the Schedule of Classes for each semester), F (Failure) shall be reported unless for unusual circumstances specific permission is given to report otherwise.

The time for dropping classes in the summer session is proportionately shorter than in the regular semester. Date deadlines for dropping or adding courses are given in the Schedule of Classes for each semester and the summer session.

Grade points are awarded as follows: For each hour of credit marked A, 4.00 grade points; A-, 3.67; B+, 3.33; B, 3.00 grade points; B-, 2.67; C+, $2.33 ; C, 2.00$ grade points; $C-, 1.67 ; D+, 1.33 ; D, 1.00$ grade point; $D-, 0.67$; F, 0.00 grade points.

Grade Index - In determining a student's cumulative grade index, all course work attempted at this university shall be used as the basis of computation with the following exceptions for students enrolled as undergraduates. If a student repeats successfully a course $s(h e)$ has previously failed, only the grade received for the successful completion will be included in figuring the cumulative grade point. If a student repeats a course $s$ (he) has successfully completed, the grade received the last time the student takes the course will be used in figuring the grade index even though the last grade may be lower than the grade received previously. The student's transcript of record will show every time the course is taken and the grade earned. Post-baccalaureate students as undergraduates enrolled for work to meet requirements for certification as elementary or secondary teachers are given the same grade index advantage as is given undergraduate students for courses repeated. This applies only to those courses required for certification. If a graduate student repeats a course, both grades count in computing the index.

Failed Courses - A course taken in an on-campus setting, which was failed, may be repeated but must also be taken in a like on-campus setting. A UNI course which was failed may be repeated at another accreditied college or university as long as the course has been determined and approved to be an equivalent to the original course. A course that has been failed may not be repeated by correspondence (specified as "Guided Independent Study" at UNI), nor may credit be established by examination for a course which has been taken previously and failed. A correspondence/UNI "Guided Independent Study" course which has been completed and failed may be repeated through correspondence/ UNI "Guided Independent Study".

## Academic Warning, Probation, and Suspension

Warning: This action is taken by the Office of the Registrar. This action is not recorded on the student's permanent academic record.

Probation: This determination is made by the Office of the Registrar. This action is not recorded on the student's permanent academic record.

Suspension: This determination is made by the Office of the Registrar. This action is recorded on the student's permanent academic record.

## For students who have attempted 29 or fewer graded hours:

Warning. Any student who is from one through five grade points deficient of the number necessary for a 2.00 cumulative grade point average at UNI and/or in combination with her/his transfer collegiate record for a 2.00 total cumulative grade point average will be placed on academic warning.

Probation. Any student who is from six through thirteen grade points deficient of the number necessary for a 2.00 cumulative grade point average at UNI and/or in combination with her/his transfer collegiate record for a 2.00 total cumulative grade point average will be placed on academic probation.

Suspension: Any student who is fourteen or more grade points deficient of the number necessary for a 2.00 cumulative grade point average
at UNI and/or in combination with her/his transfer collegiate record for a 2.00 total cumulative grade point average will be placed on academid suspension.

## For students who have attempted between 30 and 59 graded hours:

Warning. Any student who is from one through five grade pointy deficient of the number necessary for a 2.00 cumulative grade point average at UNI and/or in combination with her/his transfer collegiate record for a 2.00 total cumulative grade point average will be placed on academid warning.

Probation. Any student who is from six through eleven grade pointal deficient of the number necessary for a 2.00 cumulative grade point average at UNI and/or in combination with her/his transfer collegiate record for a 2.00 total cumulative grade point average will be placed on academic: probation.

Suspension. Any student who is twelve or more grade points deficient of the number necessary for a 2.00 cumulative grade point average at UNI and/or in combination with her/his transfer collegiate record for a 2.00 total cumulative grade point average will be placed on academic suspension.

## For students who have attempted 60 or more graded hours:

Warning. Any student who is one through five grade points deficient of the number necessary for a 2.00 cumulative grade point average at UNI and/or in combination with her/his transfer collegiate record for a 2.00 total cumulative grade point average will be placed on academic warning.

Probation. Any student who is six through nine grade points deficient of the number necessary for a 2.00 cumulative grade point average at UNI and/or in combination with her/his transfer collegiate record for a 2.00 total cumulative grade point average will be placed on academic probation.

Suspension. Any student who is ten or more grade points deficient of the number necessary for a 2.00 cumulative grade point average at UNI and/or in combination with her/his transfer collegiate record for a 2.00 total cumulative grade point average will be placed on academic suspension.

Additionally, a student's actions demonstrated by repeatedly dropping courses and/or totally withdrawing from school will bring into question the student's intent to be a serious scholar, and such students may be placed on academic suspension.

Readmission After Suspension. An undergraduate student who has been suspended may be readmitted only after applying for readmission in writing and receiving favorable action on the application from the Committee on Admission and Retention. Applications for Readmission may be secured from and filed with the secretary of the committee in the, Office of the Registrar. Academic suspension is for a minimum period of one academic year. Only the most extenuating circumstances would warrant consideration for readmission before one academic year has elapsed.

Upon readmission students must earn a minimum of a 2.00 grade point average each term they are enrolled until their cumulative grade point average is 2.00 or higher. Failure to earn a 2.00 or higher grade point average in any semester following readmission will cause the student to be suspended again. Academic suspension for a second time is considered permanent. Only the most extenuating circumstances would warrant consideration for readmission a second time.

## Dean's List

To be eligible for the Dean's Honor List, which is published each fall and spring semester, a student must have earned a grade point average of no less than 3.50 while completing at least 12 semester hours in graded
work or in field experience in that semester. A Dean's Honor List is not compiled for the summer session, nor does the list include graduate students.

## Graduation with Honors

Three levels of honors are awarded to students on graduation from a bachelor's degree curriculum. To receive an honor rating, the student must earn not less than 60 semester hours of credit at this university. Only credit earned in residence at this university is considered in making honor awards, except for students graduating with the Bachelor of Liberal Studies degree in which case both residence and no, 2 -residence credit taken at this university is considered.

The names of the students receiving honors are identified in the commencement program and on their academic transcript.

## This policy applies to students graduating through Fall 2005:

Summa Cum Laude: Students whose grade index on the basis of work at this university is 3.75 or higher are awarded Summa Cum Laude.

Magna Cum Laude: Students whose grade index is 3.50 or higher, but less than 3.75 are awarded Magna Cum Laude.

Cum Laude: Students whose grade index is 3.25 or higher, but less than 3.50 are awarded Cum Laude.

## This policy applies to students graduating Spring 2006 and after:

Summa Cum Laude: Students whose cumulative UNI grade point average places them in the top $3 \%$ of those students graduating from their academic major college/division will be awarded Summa Cum Laude.

Magna Cum Laude: Students whose cumulative UNI grade point average places them in the top $4 \%$ through top $8 \%$ of those students graduating from their academic major college/division will be awarded Magna Cum Laude.

Cum Laude: Students whose cumulative UNI grade point average places them in the top $9 \%$ through top $15 \%$ of those students graduating from their academic major college/division will be awarded Cum Laude.

## University Honors Program

www.uni.edu/honors

The University of Northern Iowa Honors Program is designed to meet the needs of motivated, high-achieving students. Honor students will be selected based on the following criteria:

For high school students: A cumulative ACT score of 27 or higher (SAT I of 1210 or higher) or a GPA of 3.65 or higher or gradu-

ation in the top $10 \%$ of the student's high school class, along with an application form including an essay and a description of high school activities.

For currently enrolled UNI or new transfer students: A GPA of 3.30 or higher along with an application form including an essay and an instructor's recommendation.
To remain in the program, students must maintain a minimum cumulative grade point requirement of 3.30 . Students who fail to do this will be placed on probation for one semester. During that semester, a student must achieve a non-cumulative grade point average of 3.30 to be removed from probation. A demonstration of improvement without attaining a 3.30 GPA may be grounds for continued probation. However, if no improvement is shown during the probationary semester, the student will be dismissed from the program. If a student wishes to re-enter the program, reapplication is necessary.

The University Honors Program offers two designations for participation: University Honors with Distinction and University Honors.

## Requirements for graduation from the Honors Program with University Honors with Distinction:

To graduate from the honors program with University Honors with Distinction, a student must produce an honors thesis or honors project and take a total of $\mathbf{3 0}$ hours of honors credit. A standard distribution of these hours would be:

Liberal Arts Core (honors sections) ...co............................... 12 hours
Honors Seminar


30 hours

## Requirements for graduation from the Honors Program with University Honors:

To graduate from the Honors Program with University Honors, a student must produce an honors thesis or equivalent honors project and take a minimum of 18 hours of honors credit. A standard distribution of these hours would be:
Honors Seminar 6 hours



$$
18 \text { hours }
$$

Note: Presidential Scholars' seminars count for Honors credit.
For more information, contact the University Honors Program Office, 257 CAC, 319-273-3175.

## Credit/No Credit Grading

An undergraduate student having earned twelve semester hours of credit at this university may take courses offered by this institution for which $s$ (he) is otherwise eligible for degree credit without grade under the following conditions:

1. The course work requirements for a student taking work on an ungraded basis shall be the same as for a student taking the work on a graded basis.
2. A grade of C - or higher is required in a course to receive credit on the "credit/no credit" option.
3. Not more than 22 hours of ungraded course work in addition to courses authorized to be offered only for ungraded credit may be taken toward any bachelor's degree.
4. Ungraded credit may not be applied to work required for a major or minor except with the consent of the head of the department in which the course is offered.
5. No course taken in the "credit/no credit" option may be applied toward meeting a Liberal Arts Core requirement.
6. Except for Field Experience: Exploring Teaching (200:017), Field Experience: Teacher as Change Agent (200:128), and for Student Teaching (280:132 through 280:140), ungraded credit may not be used to meet the Professional Education Requirements for the teaching program.
7. Course work passed without grade ("CR"=credit) may not be retaken except by special permission of the Dean of the College in which the course is offered.
8. A graded course completed may not be retaken on an ungraded basis.
9. The credit/no credit system may not be used with Credit by Examination, Extension, or Correspondence (specified as "Guided Independent Study" at UNI) courses.
10. Change of registration in a course to or from a non-graded basis may not be made after five class days beyond midterm in a full, academic-year semester, or after the mid-point in the duration of a course taught in a period less than a full, academic-year semester. Only one such change of registration may be made per course.

A graduate student may include up to three credit hours of non-graded graduate course work in the program of study with the approval of the department.
11. The credit/no credit grading system may not be used in Presidential Scholars Seminars or for the Presidential Scholars Thesis/Project credit.

## Open Credit System

This type of undergraduate credit is designed for special projects such as a paper, experiment, work of art, or portfolio assessment of prior learning. The experience upon which the project is based may have been completed at any previous time; however, the student must be registered for credit at this university during the semester "open credit" is requested and "open credit" will be recorded only after the student has satisfactorily completed 12 hours of credit at this institution.

A project may be submitted any time during the semester up to the last date to add a second half-semester course for credit. There is no guarantee of credit prior to or upon submittal of the project. The project is submitted to an ad hoc faculty committee of three faculty members recommended by the student and approved by the head of the academic department or discipline in which the project falls; two faculty members are chosen from the academic area or discipline of the project and one from any area. The student may not submit a project evaluated by one committee to a second committee for reevaluation. The student may resubmit a project to the original committee at the committee's discretion or with its encouragement.

The number of open credit hours assigned to a project will reflect the academic evaluation of the project; credit will be awarded for work judged to be of at least C-level quality. No letter grades are given. The range of credit is from 0-6 hours per project. A student may apply a maximum of 18 hours of open credit toward graduation requirements. Open credit is normally elective but, upon the recommendation of the ad hoc committee, it may be approved for requirements in the Liberal Arts Core with the approval of the Office of Academic Affairs or for major credit with departmental approval.

Students should contact the Special Programs Office or the appropriate departmental office for advice in submitting projects. Application forms may be secured from the Office of the Registrar.

## Cooperative Education/ Internship Program

Cooperative Education/Internships is an educational program which
helps students integrate academic study with work experience. Students in the Co-op/Internship Program may work full-time or part-time in a business, industry, or governmental/non-profit setting in locations ranging from local to international. All co-op/internship placements are credit bearing.

Participation in co-op/internships is optional, except for certain majors which require participation for graduation. Academic departments establish requirements for enrollment. Students may qualify for course enrollment when all of the following conditions are met:

1. The student has reached at least sophomore status.
2. The student has a grade point average of at least 2.50 based upon one semester or more of course work at UNI. Some departments may require a higher minimum grade point average than 2.50 or completion of identified prerequisite course work before participation.
3. A UNI faculty member approves the placement opportunity and all arrangements, including the project to be completed, and agrees to supervise and evaluate the student's learning experience.
4. Approval is obtained from the head of the academic department granting credit.
Staff from the Co-op/Internship Program can assist students with developing a placement opportunity and arranging for supervision at the placement site. Placements may occur during fall, spring, or summer terms. Students are encouraged to contact the Co-op/Internship Office during their freshman year to determine the point in their academic progression at which participation in a co-op/internship opportunity will benefit them most. Students may participate in more than one coop/internship experience. Information on the program can be found at www. uni.edu/careercenter/coop/

## Credit by Examination

Credit in a course may be earned by examination. Credit is earned only if a grade of $A$ or $B$ is received in the examination. A grade of $C$ will release a student from a course requirement, but gives no credit. A grade below C gives neither credit nor release and is not recorded on the student's record. Credit earned by examination is recorded on the student's record only as Passed, or Released. The results are not counted in a student's grade index.

Credit may not be established by examination for a course which has been taken previously and failed, or for a course for which the student does not meet the prerequisite, or for a course which is a prerequisite to one for which credit has already been earned.

Application for credit by examination is made to the Office of the Registrar, and approved by the head of the department offering the course and the dean of the college in which the course is offered.

The department is responsible for giving the examinations and establishing the requirements for fulfilling the examinations. Credit by examination is open to most courses offered on campus; however, a student should discuss the course requirements with the department head before making application for credit by examination.

Note: For limitations in the total amount of credit earned by examination, see page 53.

## Independent Study

Undergraduate students of outstanding ability and achievement may be permitted to earn credit by departmental independent study.

This method of study follows the pattern of an investigation undertaken by a graduate student, although in reduced form. It involves independent thinking, the drawing of conclusions, the summarizing of evidence, or creative work. Whenever possible, the result of the investigation
is summarized in a scholarly paper or report, prepared and documented in an approved fashion. This report is filed in the department office.

Independent study should not involve work available through regular university courses; neither should it be confused with individual instruction, or the tutorial method. Individual instruction is provided on rare occasions for instruction in a university course not currently being offered.

Application for independent study, including an outline of the proposed project, should be made to the head of the department in which the study is to be done and must have this approval before the project is undertaken. The student's program of independent study will be under the immediate supervision of one or more faculty members. Except for the major in Individual Studies, not more than six hours of credit earned by independent study may be used to meet the requirements of a major.

Independent study may also be taken under the Individual Studies program. See page 102 for details.

## Auditing Classes

A student may register for classes on an audit (non-credit) basis at the University of Northern Iowa if a space is available in the class. If the addition of the course to be audited (visited) makes the student's total course load hours more than is permitted according to the student's grade point average, the student must also have written approval from the Office of the Registrar for an overload of course work.

There is no reduction of fees for auditing (visiting) a course.
Specific information on auditing (visiting) classes may be obtained from the Office of the Registrar. Visitors in the courses are not required to take examinations, take part in class discussions, or complete other work. Audits will not be recorded on the permanent record except by a student request approved by the instructor showing that the student regularly attended the course.

## Writing in the Liberal Arts Core and the Disciplines

Writing fosters learning, develops thinking, and provides an essential means of communication in a literate society. The ability to write well contributes to success in the classroom and in one's personal and professional life. Northern Iowa is committed to helping students become competent writers. At UNI, students write in the Liberal Arts Core and in each undergraduate major. The Liberal Arts Core writing experience lays a foundation for the writing required within academic majors. Each department sets the writing requirements for its majors; because writing needs vary across disciplines, the requirements vary across departments.

Students satisfy Northern Iowa's Liberal Arts Core writing requirement by completing one of three Liberal Arts Core writing courses: 620:005, "College Reading and Writing"; 620:015, "Expository Writing"; or 620:034, "Critical Writing About Literature". For students who do not meet the English admissions requirement, and for other students'with limited writing experience, 620:002 "College Writing Basics" provides practice in the skills necessary for success in these courses.

## College Level Examination Program (CLEP)

The University of Northern lowa is a participating university in the College Level Examination Program (CLEP). CLEP examinations are administered regularly throughout the year. Persons interested in earning credit through CLEP should contact Academic Services for information
and dates of the examinations.
Five popular examinations are given: English Composition without Essay or with Essay, Mathematics, Natural Sciences, Social Sciences-History, and Spanish. The test scores are reported as scale scores. Scores are compared with the percentile ranks based on scores achieved by a representative sample of students at the end of their sophomore year in American colleges and universities. Credit earned by CLEP is applied to the Liberal Arts Core requirements at UNI. CLEP tests are usually taken at the time of first registration, and must be completed before registering for Liberal Arts Core courses in subject areas to which the tests apply.

A list of courses for which CLEP examinations may be taken at UNI and minimum scores to earn credit is available from the Office of Admissions or Academic Services. Students should expect their scores at the time of testing (except English Composition with Essay).

Any CLEP test may only be attempted once. For limitations on the total amount of credit earned by examination, including CLEP, which may be applied toward graduation degree requirements, see page 53.

Credit established by CLEP at an institution participating in the Iowa Community Colleges/Regents' Universities Credit by Examination Agreement will be accepted in transfer at full value when terms of the agreement are met.

Students who have established credit by CLEP at a college or university other than an Iowa Regents' University or an Iowa area community college participating in the Iowa Credit by Examination Agreement, may submit official reports of their scores for consideration. Students whose scores meet UNI standards for awarding credit on the basis of CLEP will receive appropriate credit.

A student may not earn credit by examination in an area in which $s($ he) previously has attempted or completed an equivalent course, a course of similar level, or one that is more advanced in content level. A course in which a student was enrolled until such time that a "W" for a grade was earned is considered to be an attempted course.

A fee of $\$ 70$ is charged for each examination. Fee payment, registration procedures, and test date information are available by contacting Academic Services, 125 East Bartlett Hall, UNI, 319-273-6023 or at www.uni.edu/acaadvis/examsrvs.html.

## Advanced Placement Program

The University of Northern Iowa participates in the Advanced Placement Program of the College Entrance Examination Board. Through enrollment in special courses in a participating high school, a qualified high school senior may take achievement examinations in one or more academic subjects at the college level. UNI grants college credits in art, biology, chemistry, computer science, economics, English, history, mathematics, modern language (French, German, Spanish), music, physics, political science, and psychology to students who pass examinations with scores of 3,4 , or 5 . Details of this program may be obtained from Academic Services, UNI. (For limitations in the total amount of credit earned by examination, see page 53.)

## Graduate Credit for Undergraduate Students

Undergraduate seniors who are in their final semester and within eight semester hours of graduation, or in their final summer session and within 4 hours of graduation, may register for graduate credit with the approval of the head of the department offering the course work. Approval by departments and the Graduate College must be obtained on a

Student Request form if the cumulative GPA is below 3.00. The student presents the Student Request form, with appropriate signature(s), when scheduling for class. Their combined total of course credits, both undergraduate and graduate, may not exceed 15 hours in a semester or 8 hours in a summer session, and they must be enrolled in sufficient undergraduate work to complete the bachelor's degree in the semester or summer session in which application is made.

Graduate work completed on the early admission basis will be counted as graduate credit only if the student actually earns the bachelor's degree at the end of the semester or summer session in which the work is taken. Such credits may or may not be counted toward graduate degree programs at the discretion of the graduate department.

## Workshops and Study Tours

From time to time, and especially during the summer session, opportunities are offered for earning credit under the workshop plan. Workshops provide residence credit, but a maximum of 6 semester hours may be applied toward graduation.

Occasionally, departments of the university may arrange extensive study tours here and abroad for credit. These trips are open to graduate and undergraduate students. Plans for this type of study and the number of hours of credit which may be earned are announced through university publications. During recent summers, several study tours were conducted by departments of the university. (See pages 9-11 for details.)

## Student Requests for Exceptions to Academic Policy

Students who wish to request that an individual exception be made to a stated academic policy should complete a Student Request form in consultation with their advisors. Forms are available in all departmental offices and from the Office of the Registrar. The advisor's signature is required for all requests. Other approvals may include the instructor, department head, dean, Registrar, and Associate Provost for Academic Affairs, depending on the nature of the request.

## Academic Ethics Policies

Students at the University of Northern Iowa are required to observe the commonly-accepted standards of academic honesty and integrity. Except in those instances in which group work is specifically authorized by the instructor of the class, no work which is not solely the student's is to

be submitted to a professor in the form of an examination paper, a term paper, class project, research project, or thesis project.

Cheating of any kind on examinations and/or plagiarism of papers or projects is strictly prohibited. Also unacceptable are the purchase of papers from commercial sources, using a single paper to meet the requirement of more than one class (except in instances authorized and considered appropriate by the professors of the two classes), and submis-4 sion of a term paper or project completed by any individual other than the student submitting the work. Students are cautioned that plagiarism|| is defined as the process of stealing or passing off as one's own the ideas or words of another, or presenting as one's own an idea or product which is derived from an existing source.

It is not acceptable for the work or ideas of another scholar to be presented as a student's own or to be utilized in a paper or project with out proper citation. To avoid any appearance of plagiarism or accidental plagiarism, it is important that all students become fully cognizant of the citation procedures utilized in their own discipline and in the classes which they take. The plea of ignorance regarding citation procedures or of carelessness in citation is not a compelling defense against allegations of plagiarism. A college student, by the fact that $s(h e)$ holds that status, is expected to understand the distinction between proper scholarly use of others' work and plagiarism.

A student who is found to have improperly used others' work must expect to be penalized for such action -- even if the argument is made that the action was taken with innocent intention -- and the student's instructor will normally judge such work "unacceptable." But it should be noted that the assignment of a low or failing grade for unacceptable work is not in itself a disciplinary action - even if the assignment of such a grade results in the student's receiving a lower grade in the course, including " F ", than $\mathrm{s}(\mathrm{he})$ would otherwise achieve. Such a response by an instructor is part of the normal grading process; if a student feels that $s(h e)$ has grounds to protest a grade received through this process, the student has access to the academic grievance procedure which the university has developed to deal with all student academic grievances.

On the other hand, cheating and plagiarism are issues which can affect a student's status at the university in more serious ways. As an educational institution, the university maintains standards of ethical academic behavior, and recognizes its responsibility to enforce these standards. Therefore, the following procedures of academic discipline prevail at the University of Northern Iowa.

If a student is determined by an instructor to have committed a violation of academic ethics, the instructor may take additional disciplinary action including, but not limited to, grade reduction for the course in which the infraction occurs, even if the reduction is over and above the normal consequences resulting from the grade merited by the unacceptable work.

In cases where such disciplinary action is taken, the instructor is obliged to report the action in writing, to the student, to the instructor's department head, (and, if the student is from a different department, to the head of the student's department), and to the Office of the Provost and Vice President for Academic Affairs. The Provost and Vice President for Academic Affairs will notify the student in writing that such action has been taken, and will maintain a file for each student so disciplined. (This file is confidential and is independent of the student's normal university records.)

A student wishing to appeal or dispute the disciplinary action taken may seek redress through the university academic grievance structure. In the case of a successful grievance, the evidence of the disciplinary action taken by the instructor will be expunged from the student's file by the Provost and Vice President for Academic Affairs.

In cases of particularly flagrant violations of academic ethics relating to cheating or plagiarism, the instructor may feel obliged to recommend
suspension from the University of Northern lowa for a period ranging from the term in which the infraction occurs (with a loss of all credit earned during that term) to permanent suspension from the university.

Such recommendations are sent in writing to the department head and the Provost and Vice President for Academic Affairs, the latter of whom informs the student in writing that the recommendation has been made. In such cases, the academic appeals procedure is automatically invoked by the Provost and Vice President for Academic Affairs. Until the mandatory academic appeal in such cases has been completed, the recommended suspension is not in effect. In cases of a successful appeal to such action, the materials relating to the successfully grieved disciplinary action will be expunged from all university records.

Finally, the Provost and Vice President for Academic Affairs will regularly monitor all files relating to disciplinary action taken against specific students. If the monitoring reveals a history of disciplinary actions taken against a particular student (excluding any actions which have been successfully grieved) such that there are three or more instances of such action subsequent to any academic grievances generated by such actions, the Provost and Vice President for Academic Affairs will, as a matter of course, institute proceedings for permanent suspension of that student. The procedures demand that the Provost and Vice President for Academic Affairs notify the student in writing that suspension procedures have been invoked, and there is an automatic appeal to the university academic grievance structure in all such cases.

All parts of the academic grievance structure (including those stipulated in the immediately preceding paragraph) apply in such cases, except that the Provost and Vice President for Academic Affairs, as the disciplinary officer, functions in the role of the instructor in an academic grievance relating to a specific class.

## Student Conduct

The University of Northern Iowa expects all students to observe university regulations and the city, state, and federal laws, and to respect fully the rights of others. The University Student Disciplinary Code contains more specific information concerning student conduct and disciplinary action. This information is available by visiting fp.uni.edu/ vpess/handbook.html Individual copies are available in the Office of the Vice President for Educational and Student Services, Gilchrist 200.

## Student Records

In the maintenance of student records, and in permitting access to those records or the release of information contained in those records, the University of Northern Iowa complies with the laws of the United States and the State of Iowa.

University policies relative to student records are available at the Web site www.uniedu/pres/policies. The Family Educational Rights and Privacy Act and the regulations required by this act may be reviewed in the Office of the Registrar, Gilchrist 243.

## Student Persistence

Iowa Regents' Universities have conducted studies annually of student persistence to graduation. A summary of the findings of the most recent study may be secured from the Office of the Registrar, Gilchrist 243.

## Academic Grievances/ Undergraduate Students

Equitable due process in academic matters is provided in grievance procedures for undergraduate students. These procedures are published annually in the Northern Iowan in the Student Rights and Responsibilities Statement. Copies are also available in all departmental offices and the Office of the Provost and Vice President, Seerley 1.

## Academic Grievances/ Graduate Students

For graduate students and graduate assistants, equitable due process in academic matters is provided in grievance procedures established by the Graduate College. Copies of the grievance procedure guidelines and grievance forms are available in the Office of the Graduate College, Lang 122 and on the Web at www.grad.uni.edu

## UNI Equal Opportunity Policy

## Purpose:

To provide guidelines regarding equal opportunity at the university in compliance with applicable federal and state nondiscrimination and affirmative action laws and regulations.

## Policy Statement:

The university has established its equal opportunity policy as follows:

No person shall be excluded from participation in, be denied
the benefits of, or be subjected to discrimination in employ-
ment, any educational program, or any activity of the uni-
versity, on the basis of race, color, sex, age, disability, veteran
status, religion, national origin, sexual orientation, or on any
other basis protected by federal and/or state law.
The University of Northern lowa seeks to prohibit discrimination and to promote affirmative action in its educational and employment policies and practices.
(Approved by the President's Cabinet April 1, 2002)
For additional information, contact the Office of Compliance and Equity Management, Gilchrist 115, UNI, (319) 273-2846, or visit www.uni.edu/equity.

## UNI Anti-Discrimination and Harassment Policy

## Purpose:

To provide guidelines regarding discrimination and harassment applicable to the entire university.

## Policy Statement:

It is the policy of the University of Northern Iowa that there will be equal employment and educational opportunity without regard to race, color, sex, age, disability, veteran status, religion, national origin, sexual orientation, or any other basis protected by federal and/or state law. This includes the provision of a campus environment that is free from illegal discrimination and harassment. The university will not tolerate any form of illegal discrimination or harassment and will not condone any actions or words from employees or students that constitute such.

All members of the university community are accountable for com-
pliance with this policy. The university is committed to eliminating illegal discrimination and harassment, wherever they occur in the university community, by taking corrective action as a result of violations of this policy. Violations may lead to disciplinary action up to and including separation from the university.

Sexual harassment is an important concern to the university and therefore warrants particular attention. The University of Northern Iowa considers sexual harassment to include unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

1. Submission to such conduct is made explicitly or implicitly a termor condition of an individual's employment or academic standing;
2. Submission to or rejection of such conduct by an individual is used as the basis for employment decisions or academic decisions affecting the individual; or
3. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working, academic, or social environment.
Consensual Relationships: Consensual romantic and/or sexual relationships where a power differential exists, whether real or perceived, may constitute sexual harassment. The effect of such a relationship may rendér an individual's work, academic, or social environment intimidating, offensive, or hostile. Further, the individual with the power in the relationship will bear the burden of responsibility should a complaint of sexual harassment be filed. Hence, all university employees are strongly discouraged from entering into romantic and/or sexual relationships, which could lead to the creation of a hostile educational, social, and/or work environment for other members of the university community.

Confidentiality: Complaints of discrimination or harassment filed with the university will be treated with the utmost privacy possible to the extent allowed by law, while also assuring a complete investigation. University personnel involved in or responsible for any aspect of a complaint shall maintain such confidentiality throughout the processing of the complaint.

Should the complainant publicly discuss the complaint, the university shall be relieved of its confidentiality obligations related to the disclosed information under this policy.

Retaliation: The university seeks to create an environment where its students and employees are free, without fear of reprisal, to use these procedures to determine if there has been a violation of their civil rights. Any act of retaliation will result in appropriate disciplinary action. Similarly, persons who use this process to bring frivolous or otherwise bad faith allegations against an employee shall be subject to disciplinary action.

Reporting Responsibilities: All university employees in a supervisory capacity are required to report to the Office of Compliance and Equity Management any allegation of discrimination and/or harassment of which they are made aware. The confidentiality of all parties will be honored to the extent legally allowed and which provides for an appropriate investigation. Persons seeking information or guidance concerning potential discrimination or harassment allegations are advised that the university may need to take action once it is informed of an allegation whether or not the person wants to pursue a complaint.

Non-supervisory employees are strongly encouraged to report allegations of discrimination and/or harassment to any supervisor or directly to the Office of Compliance and Equity Management.

Disabilities: An employee, student, or visitor with a disability who wishes to request an accommodation must contact the Office of Disability Services. If an employee or student feels their rights under the Rehabilitation Act of 1973 and/or the Americans with Disabilities Act of 1990 have been violated, they may consult with the Office of Compliance and Equity Management and/or utilize the following procedures.

Procedure for Resolution: An allegation of discrimination and/or harassment against either an employee or graduate student who is employed by the university should be addressed to the Office of Compliance and Equity Management. An allegation against a student should be filed in the Office of the Vice President for Educational and Student Services.

An employee or student alleging discrimination and/or harassment is encouraged to discuss the allegation with the head of the department, as appropriate, in which the alleged discrimination occurred. This step is to facilitate an informal resolution of the matter whenever possible. In the event that an informal resolution is not reached, the student or employee may consult with the Office of Compliance and Equity Management to initiate a formal investigation.

The Office of Compliance and Equity Management will provide a complaint form, which the complainant will then complete and return. The complaint will describe the alleged discrimination and/or harassment, the specific type of discrimination and/or harassment being alleged, and name of person(s) against whom the complaint is being filed.

The Office of Compliance and Equity Management will acknowledge the receipt of the complaint in writing and will also notify in writing the following parties: the accused person and her/his department head/ director, dean, vice president, and the president. When deemed appropriate, the complainant is then given the option to resolve the complaint through mediation rather than investigation. Only if both the complainant and accused agree to mediation will that option be utilized. In the event that either party declines mediation, the Office of Compliance and Equity Management will conduct an investigation of the alleged discrimination or harassment charges.

Following is the process for the investigation of complaints which have not been resolved through mediation:

A person designated by the Office of Compliance and Equity Management will initiate an investigation into the allegations. A typical investigation will involve meeting with the person filing the complaint, the person(s) named in the complaint, and with other persons who may have knowledge relevant to the investigation.

The Director of the Office of Compliance and Equity Management will receive a report of the investigation from the designated investigator. S/he will render a finding of sufficient or insufficient evidence to support the complaint. This determination will be based upon the evidence obtained as a result of the investigation process. The complainant and the accused will be notified of the finding in writing. The accused person's department head/director, dean, vice president, and the president will also be notified.

In the event that there is a finding of a violation of university policy, the department head/director of the accused will determine appropriate disciplinary sanctions, and will notify in writing the accused and the Office of Compliance and Equity Management of her/his decision. This written decision must be issued within fifteen working days of the date of the notice from the Office of Compliance and Equity Management. When someone of the rank of department head/director or higher serves as a party or witness in an investigation, the notice will be sent to that party/witness' immediate supervisor for determination of disciplinary sanctions. This is the conclusion of the internal procedures under this policy.
(Approved by the President's Cabinet April 1, 2002)
For additional information, contact the Office of Compliance and Equity Management, Gilchrist 115, UNI, 319-273-2846.

Liberal Arts Core courses included in major or minor program requirements are distinguished by italics.

Completion of majors labeled "Extended Program" will take more than eight semesters of full-time enrollment.

## Accounting

## (College of Business Administration)

## www.cba.uni.edu/accounting

M. Wartick, Acting Head. R. Abraham, L. Andreessen, W. Bowlin, D. Davis, S. Harrast, T. Lindquist, L. Mason, L. Nicholas, D. Schmidt, G. Smith.

Note: Students majoring in Accounting must satisfy the College of Business Administration (CBA) admission requirements before they can officially declare their major. A copy of the Admission, Retention, and Graduation Policy may be obtained from the Advising and Student Services Office in the College of Business Administration. Prior to completion of the admission requirements, students may sign an intent to major in Accounting and be classified as a prospective (pre)major. PreAccounting majors may enroll in lower division (below 100) business courses only. Enrollment in upper division (100-level) business courses requires satisfactory completion of the CBA admission requirements and any course prerequisites.

Accounting majors may declare a double major, and/or major and minor within the College of Business Administration subject to regulations imposed by those CBA departments affected. Accounting majors minoring within the CBA must select minors designated for business majors.

To graduate with a major in Accounting from the College of Business Administration, a student must earn at least $50 \%$ of the business credit hours required for the major at UNI. In addition, a minimum of nine graded hours must be earned in 100 -level UNI Accounting courses. Students must take at least $50 \%$ of the course work required for the degree outside the College of Business Administration. Up to nine hours of economics (excluding 920:020) and six hours of statistics may be counted as outside the College of Business Administration. A student must earn a 2.20 cumulative grade point average at UNI and earn an overall 2.20 grade point average in 120:xax, 130:xax, 150:xox, 160:xax, and 920:xxx courses taken at UNI, and earn a grade of C- or better in 120:130. Students given permission to graduate out-of-residence must earn a 2.20 or better in all courses approved and accepteed for out-of-residence credit.

Students who want to write the Uniform CPA Examination in Iowa should secure current requirements from the Iowa Accountancy Examining Board in order to plan their program of study so that all requirements are met. Students who want to write the Uniform CPA Examination in other states should secure the same information from the applicable state board of accountancy.

Students may repeat Accounting courses with the exception that subsequent to successfully completing a 100 -level Accounting course, they may not repeat Principles of Financial Accounting (120:030) or Principles of Managerial Accounting (120:031).

The Accounting Department may impose additional admission requirements for students wishing to declare a minor or a second CBA major. Eligibility to declare a minor or a second CBA major is based on competitive GPA and space availability. Students may obtain a copy of these requirements from the Advising and Student Services Office (CBB 321B) in the College of Business Administration.

## Bachelor of Arts Degree <br> Programs

- 120 semester hours


## Accounting Major

Required business core:
Accounting: 120:030; 120:031 ............................................... 6 hours
Marketing: 130:101 ............................................................... 3 hours
Management: $150: 080 ; 150: 100 ; 150: 153 ; 150: 154 ; 150: 17515$ hours
Finance: 160:151 .................................................................. 3 hours
Economics: 920:020*; 920:053; 920:054; 920:070*............. 12 hours
Required:
Accounting: 120:129; 120:130; 120:131; 120:132; 120:134;
120:136.
18 hours
57 hours
While Accounting Majors are not required to take accounting electives, the following electives are offered: $\mathbf{1 2 0 : 1 3 5}, 120: 139,120: 141$, 120:142. Depending on individual career goals and professional certification requirements, certain electives may be highly recommended in addition to the required courses. Students who wish to be a candidate for the Uniform Certified Public Accountant Examination should follow the requirements of the Iowa Board of Accountancy.
*In addition to the required 57 hours, 920:020 and 920:070 have as a prerequisite $800: 072$ or $800: 092$, either of which will satisfy Category 1C of the Liberal Arts Core.

## Accounting Minor-Business

Required:
Accounting: 120:129; 120:130 .
6 hours
Accounting electives from the following: 120:131;
$120: 132 ; 120: 134 ; 120: 135 ; 120: 136 ; 120: 141 ; 120: 142$.. 6 hours
12 hours
Available to Majors in: Business Teaching, Economics-Business Analysis Emphasis, Finance, Management, Management Information Systems, Marketing, and Real Estate.

## Accounting Minor

Required:
Accounting: 120:030 .............................................................. 3 hours
Marketing: 130:101 ................................................................ 3 hours
Management: 150:153 .......................................................... 3 hours
Electives: at least 9 hours from accounting area ................ 2 hours
18 hours.
NOT available to majors in Accounting, Business Teaching, Econom-ics-Business Analysis Emphasis, Finance, Management, Management Information Systems, Marketing and Real Estate.
Note: 130:101 has a prerequisite of either 920:024 or 920:053. 920:024 or both 920:053 and 920:054 will satisfy Category 5B of the Liberal Arts Core.

## Art

## (College of Humanities and Fine Arts)

## www.uni.edu/artdept

S. Taft, Acting Head. C. Adelman, R. Behrens, J. Byrd, R. Colburn, T. Dooley, f. echeverria, P. Fass, A. Golczewski, M. Frisbee Johnson, J. Petsch, J. Schnabel, A. Sherin, T. Stancliffe, C. Streed, D. Webster, A. Wilson.

Major programs are offered by the Department of Art in two baccalaureate degree areas, the Bachelor of Arts and the Bachelor of Fine Arts. The Bachelor of Arts degree is a liberal arts program that provides the art major with three emphasis options: studio, art history, or art education (teaching). The Bachelor of Fine Arts degree is a professional program with an intensive studio emphasis. The baccalaureate degree programs in the Department of Art are accredited by the National Association of Schools of Art and Design.

No grade of less than C- shall satisfy any art major or minor degree requirement whether taken at UNI or transferred from another institution. For all studio courses in the Department of Art programs the ratio of student work hours to credit hours is 3:1. Therefore, additional work is required outside the regular class meeting times.

Courses in the Department of Art require specialized materials, some of which are provided through art lab fees.

Art courses which fulfill an Art major requirement cannot be used to fulfill Category 3A of the Liberal Arts Core.

## Foundations Program

The Foundations Program is a one-year program required for all art majors and art minors. Introductory courses are offered that will provide an intense exploration of basic art concepts and skills as preparation for specialized and advanced areas of study.

Art majors take the 18 hours of introductory courses in the first year of study. The Foundations Program is prerequisite to all studio and art history courses. Generally, students enroll in Drawing I, 2-D Concepts, and Survey of Art History I during the first semester and Drawing II, 3-D Concepts, and Survey of Art History II the second semester.

The Foundations Program is a prerequisite for introductory level courses taken only by Art majors and minors.

## Required:

Art: 600:018; 600:019; 600:026; 600:027; 600:040; 600:041.. 18 hours

# Bachelor of Fine Arts Degree Program 

- 130 semester hours

A B.F.A. portfolio admission review is required of all students seeking admission to the B.F.A. degree program. Students must apply for admission prior to the completion of 45 semester hours of art. To qualify for the review students must: 1) have a minimum cumulative GPA in Art of 2.75 and 2.50 overall, 2) complete the Foundations Program, 3) have completed or be completing in the semester of application 6 hours of Studio Distribution, 4) be enrolled in or have completed a second semester in a selected studio area (students electing a drawing emphasis must be enrolled in or have completed a third semester of drawing beyond Drawing II), 5) complete the B.F.A. Admission Application, and 6) submit a portfolio of art work for review. Students may reapply for admission to the B.F.A. program.

## Art Major: Studio B_F.A.

The B.F.A. Art Major with Studio Emphasis requires a minimum of 130 total hours to graduate.

## Required: Foundations Program (600:018; 600:019; 600:026; 600:027; 600:040; 600:041).................................................. 18 hours

Required: studio distribution ...................................................... 12 hours
Group 1: 2-D studio distribution.
Choose two courses from 600:025; 600:032; 600:033 or 600:034 or 600:035 or 600:036; 600:080.
Group 2: 3-D studio distribution.
Choose two courses from 600:037; 600:050; 600:060; 600:074.
Required: history of art distribution............................................ 9 hours
Required: B.F.A. courses
B.F.A. portfolio admission review

600:192 B.F.A. seminar
2 hours
600:189 B.F.A. exhibition ....................................................... 0 hours
Required: courses in studio concentration
Five courses in studio concentration.
15 hours
600:196 B.F.A. Project I (in area of studio concentration) .. 3 hours 600:197 B.F.A. Project II (in area of studio concentration)... 3 hours (Studio courses used to fulfill the studio distribution courses may not be used for studio concentration)
Studio art electives.
15 hours
77 hours
As a graduation requirement, each B.F.A. candidate must complete a concentration of no less than 21 semester hours in any one of the following studio areas: ceramics, drawing (excluding Drawing I and Drawing II), graphic design, jewelry/metals, painting, photography, printmaking, or sculpture.

Also required is the B.F.A. Exhibition $(600: 189)$ which serves as the exit requirement for this degree program.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)


## Art Major-Studio Emphasis

Required: Foundations Program (600:018; 600:019, 600:026; 600:027; 600:040; 600:041).

18 hours
Required: studio distribution 6 hours
Group 1: 2-D studio distribution
Choose one course from 600:025, 600:032, 600:033, 600:034, 600:035, 600:036, or 600:080.
Group 2: 3-D studio distribution
Choose one course from 600:037, 600:050, 600:060, or 600:074.
Required: art history distribution ............................................... 6 hours
Required: studio concentration.................................................. 12 hours
12 hours in any one of the following areas: ceramics, drawing (excluding Drawing I and Drawing II), graphic design, jewelry/metals, painting, photography, printmaking, or sculpture. Studio courses used to fulfill the studio distribution requirement cannot be used to fulfill requirements in the studio concentration.
Studio electives.
6 hours
48 hours

## Art Major-Art History Emphasis


Required: studio distribution. .6 hours
Group 1: 2-D studio distribution
Choose one course from 600:025, 600:032, 600:033, 600:034, 600:035, 600:036, or 600:080.
Group 2: 3-D studio distribution
Choose one course from 600:037, $600: 050,600: 060$, or 600:074.
Required: art history distribution ............................................... 6 hours
One course from each of the following groups:
Group 1-600:139; 600:140; 600:141-01; 600:141-05; 600:141-06.
Group 2 - 600:141-02; 600:142; 600:144; 600:146; 600:151; 600:152.
Required: art history in non-Western cultures............................. 3 hours
One course from the following: 600:139; 600:140; 600:141-03; 600:141-04; 600:141-07; 600:147.
Required: 600:138. 2 hours
Required: art history concentration................................................................ 9 hours
At least three courses from the aforementioned art history Group 1 or Group 2.
Art history courses used to fulfill the art history distribution requirement cannot be used to fulfill requirements in the art history concentration.

## Art history electives.

 6 hoursA minimum of two courses from the above listing of art history courses and/or $600: 153$ or $600: 191$.

50 hours
Students electing an emphasis in Art History must also fulfill a foreign language requirement of 13-18 hours, or demonstrate competency through the first of the composition courses in the chosen language. French or German is recommended.

## Art Education Major-Teaching

Required: Foundations Program ( $600: 018 ; 600: 019 ; 600: 026$; 600:027; 600:040; 600:041) 18 hours
Required: studio distribution 12 hours
Group 1: 2-D studio distribution
Choose two courses from 600:025; 600:032; 600:033 or 600:034 or 600:035 or 600:036; 600:080.
Group 2: 3-D studio distribution
Chose two courses from 600:037, 600:050, 600:060, 600:074.
Required: art history distribution $\qquad$ 6 hours
Required: professional methods courses* (600:091; 600:093; 600:120;600:121) 10 hours
Art emphasis ..... 6 hours

Art Education majors must choose an Art Emphasis. Either a Studio Emphasis of 9 hours (one Studio Distribution course plus two more courses) in one of these areas: ceramics, drawing (excluding Drawing I), graphic design, jewelry/metals, painting, photography, printmaking, or sculpture; OR an Art History Emphasis of 12 hours (two upper-level Art History courses in addition to the 6-credit History of Art Distribution).
*Completion of these courses will satisfy 240:020 of the Professional Education Requirements.

## Art Minor

Required: Foundations Program (600:018; 600:019; 600:026; 600:027; 600:040; 600:041) 18 hours
Art Studio or Art History elective. 3 hours
Art Minor-Teaching
Required: Foundations Program (600:018; 600:019; 600:026; 600:027; 600:040; 600:041) 18 hours
Required: Studio electives ..... 6 hoursRequired: Art Education (elementary and secondary)Elementary Art Education: 600:091 and 600:1205 hours
Secondary Art Education: 600:093 and 600:121. ..... 5 hours
Art Minor (K-6)-Teaching
Required:Art: 600:018; 600:019; 600:026; 600:027; 600:040; 600:041;600:091; 600:120.23 hours
Elective in art: may include 600:002 or 600:004 ..... 6 hours
29 hours

## Biology

## (College of Natural Sciences)

## www.bio.uni.edu

B. Hetrick, Head. L. Beltr, V. Berg, B. Bergquist, D. Brecheisen, E. Brown, M. Clayton, J. Demastes, K. Dhanwada, J. Gerrath, L. Jackson, J. Jurgenson, C. Lee, M. McDade, D. Mercer, S. O'Kane, W. Olson, K. Pontasch, O. Schwartz, R. Seager, D. Smith, T. Spradling, J. Tamplin, C. Thurman, J. Trainer, M. Walter, J. Weld, P. Whitson, D. Wiens.

Major programs are offered by the Department of Biology in two baccalaureate areas: the Bachelor of Arts and the Bachelor of Science. The Bachelor of Science degree is recommended for most students preparing for graduate study in biology. The Bachelor of Arts degree provides a choice among several tracks depending upon student interest and/or career plans.
Note: Students should submit their declaration of a biology major early in their college programs. This will permit them to plan their major courses with a department advisor to avoid future conflicts. Transfer students with previous courses in biology, zoology, or botany must have transfer courses evaluated to avoid duplication and possible loss of credit. Decisions regarding UNI major courses and transfer credits should be approved by the department head or advisor.

## Academic Standard Policy

## Majors

1. Students should indicate their interest in majoring in biology by filling out a Declaration of Curriculum form any time after their admission to UNI.
2. A student's freshman year shall be devoted primarily to completing the required course work in general biology (840:051 and 840:052) and chemistry (860:044 and 860:048, or 860:070). Liberal Arts Core and/or math classes should be taken by students to complete their schedules.
3. Students must receive a grade of C - or higher in courses that are applied to their major.
4. Students with ACT mathematics scores below 24 are required to complete either Elementary Analysis (800:046) or Mathematics for the Biological Sciences $(800: 056)$ with a grade of C - or higher before they can graduate with a biology major.
5. If a student drops a course after the first seven days of classes, in the subsequent semester they will only be allowed to register for that course after all advanced registration is completed.
6. To graduate from UNI with a biology major, students must have both a cumulative and a major UNI GPA of 2.50 or higher, with a grade of C - (1.67) or higher in all courses that are applied to the major.
7. Transfer students entering UNI shall be subject to the acceptance requirements listed in \#3.

## Minors

To graduate from UNI with a biology minor, students must have both a cumulative and a minor UNI GPA of 2.50 or higher, with a grade of C - (1.67) or higher in all courses that are applied to the minor.
biology core courses are to be selected from list below.
Introductory track: 840:051; 840:052; 840:140.
Group I (Cellular and Molecular Biology): 840:114 and 840:115; 840:122*; 840:128; 840:137 and 840:138; 840:146; 840:151; 840:152; 840:172*.
Group II (Ecology): 840:103; 840:126; 840:154; 840:168; 840:171.
Group III (Systematics and Evolution): 840:106; 840:112;840:120*; 840:131; 840:132; 840:142; 840:160; 840:162; 840:164; 840:166*; 840:170.
*At least one plant course must be taken from those marked with asterisk
(*) in the core or from: 840:124; 840:173.

## Bachelor of Science Degree Program

- 126 semester hours


## Biology Major

The Bachelor of Science Major in Biology is designed to prepare students for careers in areas which require a higher degree of concentration in subject matter and cognate areas, particularly advanced-level courses. This degree is especially appropriate for students planning graduate study. In order to ensure graduation within eight semesters, students should work with advisors early in their programs, as advance planning for sequenced courses is very important.

## Required:*

Biology core:
Introductory track: 840:051; 840:052; 840:140** ....... 12 hours
Group I: select one option ........................................... 4 hours
Group II: 840:168 .......................................................... 3 hours
Group III: select one option ......................................3-4 hours
Biology: 840:157; 840:169; 840:190 (2-3 hrs.) ...........6-7 hours
Cognate courses:
Mathematics: 800:060; 800:061 ...................aco...aco.o.o.... 8 hours
Computer Science: 810:030 or 810:035 or 810:036 ..... 3 hours
Chemistry: 860:044 and 860:048***; 860:120;
860:121; 860:123................................................. 16 hours
Physics: 880:054; 880:056 .............................................. 8 hours
Electives in biologyw: ( $100-$ level or above, excluding
 71 hours
*At least 7-8 hours of biology credit must be 100g-level.
**840:140 is not required as a prerequisite for 100 -level courses.
***Students with excellent preparation in chemistry may substitute 860:070 plus 3 additional credit hours of biology electives for 860:044 and 860:048. \#Not more than four (4) semester hours of credit from 840:179,840:185, $840: 190$ and $840: 198$ will be accepted for biology elective credit.

## Emphasis-Honors Research

Students invited to do "Honors Research" will complete 4 credit hours of $840: 190$ (Undergraduate Research) and 1 credit hour of $840: 191$ (Senior Thesis). These hours may be applied to the elective hours of the major.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)


## Emphasis-Honors Research

Students invited to do "Honors Research" will complete 4 credit hours of 840:190 (Undergraduate Research) and 1 credit hour of 840:191 (Senior Thesis). These hours may be applied to the elective hours of the major.

## Biology Major

This major provides a broad training in biology but allows different specializations through choice of electives. Students who select this major to prepare themselves for graduate study in the biological sciences should consult with their advisor for elective courses.

## Required:*

Biology core:
Introductory track: 840:051; 840:052; 840:140** ....... 12 hours
Group I: select one option ........................................... 4 hours

Group III: select one option ......................................-4-4 hours
Cognate courses:
Mathematics: 800:046 or 800:060 or 800:044 and

Chemistry: 860:044 and 860:048***; 860:120 and 860:121 or 860:063

12-13 hours Earth Science: 870:031; 870:035 or Physics: 880:054; 880:056 $\qquad$ 8 hours
Electives in biology\#: ( 100 -level or above, excluding

58 hours
*At least 7-8 hours of biology credit must be 100 g -level.
**840:140 is not required as a prerequisite for 100 -level courses.
***Students with excellent preparation in chemistry may substitute 860:070 plus 3 additional credit hours of biology electives for 860:044 and 860:048. \#Not more than four (4) semester hours of credit from 840:179, 840:185, $840: 190$ and $840: 198$ will be accepted for biology elective credit.

## Biology Major: Biomedical Emphasis

This major offers basic preparation to student for allopathic, osteopathic, chiropractic, physical therapy, dental, veterinary, optometric, podiatric and other health-related programs. In addition, it prepares students for graduate study in biomedical sciences, e.g., pharmacology, toxicology, pathology, physiology, cellular biology and related areas. Students should seek advice and information early in their programs so that individual goals and specific additional requirements of some graduate and professional programs can be considered in curricular planning.

## Required:*

Biology core:
Introductory track: 840:051; 840:052; 840:140** ....... 12 hours
Group I: select one option ............................................. 4 hours

Group III: select one option ..............................................-4 hours
Cognate courses:
Mathematics: 800:046 or 800:060 or 800:044 and

Chemistry: 860:044 and 860:048**; 860:120; 860:121; 860:123...........e.t........................................... 16 hours
Physics: 880:054; 880:056.............................................. 8 hours
Electives selected from the following (consult with advisor):.... $5-8$ hours
Biology" 840:106; 840:114; 840:124; 840:128; 840:130;
840:132; 840:138; 840:142 or 840:148; 840:144;
840:146; 840:147; 840:149; 840:150; 840:151; 840:152;
840:157; 840:179; 840:185; 840:190; 840:198.
Chemistry: 860:154.

## 58 hours

*At least 7-8 hours of biology credit must be 100 g -level.
**840:140 is not required as a prerequisite for 100 -level courses.
***Students with excellent preparation in chemistry may substitute 860:070 plus 3 additional credit hours of biology electives for 860:044 and 860:048. \#Not more than four (4) semester hours of credit from 840:179, 840:185, 840:190 and $840: 198$ will be accepted for biology elective credit.

## Biology Major: Ecology and Systematics Emphasis

This emphasis provides training to students interested in organismal and/or ecological biology. With the guidance of a faculty advisor, students who wish to specialize further may follow one of four separate tracks: Ecology, Applied Ecology, Botany, or Zoology. This emphasis is appropriate for students interested in a career with private and governmental organizations conducting endangered species recovery, ecological restoration, biological surveys, toxicity evaluations, environmental impact analyses, field research, museum or herbarium curation, or who wish to work in zoos, nature centers, museums, or botanical gardens. This emphasis also provides suitable background for students wishing to pursue graduate degrees in ecology, animal behavior, systematics, conservation biology, environmental toxicology, population biology, and evolutionary biology. Students who want information about these careers may take 840:060. A program of field courses offered during the summer is available through Iowa Lakeside Laboratory.

```
Required:*
    Biology core:
        Introductory track: 840:051; 840:052; 840:140** ....... }12\mathrm{ hours
        Group I: 840:114 and 840:115; or 840:122; or
```




```
        Group III: select two of the following: 840:112;
                840:120; 840:160; 840:162; 840:164; 840:166;
                840:170
                        6-8 hours
        Biology: 840:169 ...0.........................oco.o........................... I hour
        Cognate courses:
        Mathematics: 800:046 or 800:060 or 800:044 and
        800:056
```

$\qquad$

```
                                .4-5 hours
        Chemistry: 860:044 and 860:048***; 860:063 or
            both 860:120 and 860:121.
                .12-13 hours
        Physical Science: 870:031 or 880:054 ..o........................4 4 hours
Electives in biology:*: (100-level approved by
    department**, excluding 840:184) ........o.o.o...................-.-12-16 hours
                                62 hours
*At least 7-8 hours of biology credit must be 100 g -level.
** \(840: 140\) is not required as a prerequisite for 100 -level courses.
***Students with excellent preparation in chemistry may substitute 860:070 plus 3 additional credit hours of biology electives for 860:044 and 860:048. \#Not more than four (4) semester hours of credit from 840:179, 840:185, \(840: 190\) and \(840: 198\) will be accepted for biology elective credit. \#\#If 840:180 is taken to satisfy a requirement of the Natural History Interpretation Minor, it cannot be used for credit on this emphasis as well.
```


## Biology Major: Microbiology Emphasis

This emphasis provides a broad overview of microbiology, including virology, molecular biology, and general microbiology. It is excellent preparation for careers in microbiology in the health sciences or industry and for graduate training in microbiology and related fields.

```
Required:*
    Biology Core:
        Introductory track: 840:051; 840:052; 840:140** ....... }12\mathrm{ hours
```



```
        Group II: select one option .................o.....................4-4 hours
```




```
        Cognate courses:
        Mathematics: 800:046 or 800:060 or 800:044 and
            800:056
                                .o.4-5 hours
        Chemistry: 860:044 and 860:048***; 860:063 or
                860:120;860:121 and 860:123 ..................... 12-16 hours
            Physics; 880:054 ............................................................}4\mathrm{ hours
Electives: selected from the following
    (consult with advisor)
```

$\qquad$

```
                            5-12 hours
    Biology#: 840:128; 840:130; 840:132; 840:144; 840:147;
        840:149; 840:150.
    Chemistry: 860:154.
    Physics: 880:056.
                                58 hours
\({ }^{*}\) At least 7-8 hours of biology credit must be 100 g -level.
**840:140 is not required as a prerequisite for 100 -level courses.
***Students with excellent preparation in chemistry may substitute \(860: 070\) plus 3 additional credit hours of biology electives for 860:044 and 860:048. \#Not more than four (4) semester hours of credit from 840:179, 840:185, \(840: 190\) and \(840: 198\) will be accepted for biology elective credit.
```

Undergraduate Program Requirements Biology

## Biology Major: Plant Bioscience Emphasis

This emphasis provides training to students interested in plant bioscience. Students will be trained in the principles and techniques of traditional and molecular biology, tissue culture, and propagation methods. This emphasis is appropriate for students interested in crop improvement, nutritional enhancement, pharmaceutical production, genetic engineering, and plant-based biotechnology which contributes to a wide array of industrial and research applications. Employment opportunities are in agricultural research, food production, and in the pharmaceutical and manufacturing sectors. This emphasis also provides a strong background for students wishing to pursue graduate degrees in the plant biosciences, plant physiology, plant biotechnology, plant genetics, plant pathology and protection, plant developmental biology and others. Students who want information about these careers may take 840:060.

## Required:*

Biology Core:
Introductory track: 840:051; 840:052; 840:140** ....... 12 hours
 Group II: 840:103 or 840:126 or 840:168 or 840:171 3-4 hours Group III: 840:120 or 840:166 .................................... 3-4 hours Biology: Select one of the following: 840:112; 840:114 and 840:115;840:160; 840:162; 840:164; 840:170; 840:171................................. 3-4 hours
Cognate courses: Mathematics: 800:046 or 800:060 or 800:044 and
 Chemistry: 860:044; 860:048***; 860:120; 860:123 ... 14 hours Physics: 880:054 ............................................................. 4 hours
Electives selected from the following ......................................... 3-7 hours
Biology": 840:103; 840:120; 840:126; 840;128; $840: 130 ; 840: 142 ; 840: 144 ; 840: 151 ; 840: 152$; 840:153; 840:157; 840:166; 840:168; 840:170; 840:171.
Chemistry: 860:154
58 hours
*At least 7-8 hours of biology credit must be 100 g -level. Courses used to satisfy the required part of this emphasis cannot be used as biology electives.
**840:140 is not required as a prerequisite for 100 -level courses.
***Students with excellent preparation in chemistry may substitute 860:070 plus 3 additional credit hours of biology electives for 860:044 and 860:048. \#Not more than four (4) semester hours of credit from 840:179, 840:185, 840:190 and $840: 198$ will be accepted for biology elective credit.

## Biology Major-Teaching

## (Extended Program)

The Biology Teaching major provides a broad education in biology. Along with professional education courses and student teaching, this curriculum is a sound preparation for teaching life science, biology, and other secondary science courses. This is an extended program requiring at least nine semesters; therefore, students should contact their advisors early in their program. This program is an excellent preparation for graduate work in biology or science education.

The Biology Teaching major requires a minimum of 134 total hours to graduate.

## Required:*

"Biology core:
Introductory track: 840:051; 840:052; 840:140** ....... 12 hours
Group I: 840:122 or 840:172 ........................................ 4 hours
Group 11: 840:168 ...o..................................................... 3 hours
Group III: 840:142; plus one additional course ........6-7 hours
Biology ${ }^{* *}$ : 840:169; one of the following -
$840: 146$; or $840: 114$ and $840: 115$; or $840: 137$
and 840:138 ...o............................................................. 5 hours
Cognate courses:
Chemistry: 860:044; 860:048****; 860:063.................. 12 hours
Earth Science: 870:031 .................................................. 4 hours
Physics: 880:054........................................................................ 4 hours
Methods:
Science and Science Education: 820:190; 820:196 ....... 5 hours
Biology: 840:193; 840:197 4 hours
Electives in biology\#: ( 100 -level or above,
excluding 840:101)
3 hours
63 hours
*At least 7-8 hours of biology credit must be 100 g -level.
**840:140 is not required as a prerequisite for 100 -level courses.
***Students who take $840: 101$ and $840: 102$ may substitute four hours of this credit for $840 ; 137$ and $840: 138$; if so, neither $840: 101$ nor $840: 102$ can count as biology elective credit.
****Students with excellent preparation in chemistry may substitute 860:070 plus 3 additional credit hours of biology or chemistry electives for 860:044 and 860:048.
\#Not more than four (4) semester hours of credit from 840:179, 840:185, $840: 190$ and $840: 198$ will be accepted for biology elective credit.

## Biotechnology Major

This major is designed to provide educational training for employment in modern biotechnology fields in both the public and private sectors or for graduate school. Basic skills in recombinant DNA, genetics, microbiology, and biochemistry are emphasized.

[^1]
## Biology Minor

Required:*<br>Biology core:

Introductory track: 840:051; 840:052; 840:140** ....... 12 hours
Chemistry: 860:044 and 860:048*** 8 hours
Electives in biology: ( 100 -level, excluding 840:101,
840:179, 840:185, 840:190, and 840:198) .......................-6-8 hours
26-28 hours
*At least 3 hours of biology credit must be 100 g -level.
**840:140 is not required as a prerequisite for 100 -level courses.
***Students with excellent preparation in Chemistry may substitute 860:070 plus 3 additional credit hours of biology electives for $860: 044$ and 860:048.

## Biology Minor-Teaching

The Biology Minor-Teaching provides for second endorsement approval by the Iowa Board of Educational Examiners and requires first endorsement approval (major) in another science discipline or general science.

> Required:*
> Biology core:
> Introductory track: 840:051; 840:052; 840:140** ....... 12 hours
> Chemistry: 860:044 and 860:048*** ..................................... 8 hours
> Methods:
> Science and Science Education: 820:190; 820:196 ....... 5 hours
> Biology: 840:193 ........................................................... 3 hours
> Electives in biology: ( 100 -level, excluding 840:101,
> 840:179, 840:185, 840:190, and 840:198) 5 hours 33 hours
*At least 3 hours of biology credit must be 100 g -level.
**840:140 is not required as a prerequisite for 100 -level courses.
***Students with excellegnt preparation in chemistry may substitute 860:070 plus 3 additional credit hours of biology electives for 860:044 and 860:048.

## Natural History Interpretation Minor

The Natural History Interpretation minor provides students with interpretive techniques and opportunities to gain practical experience with interpretation and environmental education program development. This minor, taken with the Biology Major: Ecology and Systematics Emphasis or the Earth Science Major: Interpretive Naturalist Emphasis, comprises the Natural History Interpretation program. This program prepares students for employment as interpreters with park systems, nature centers, zoos, museums, planetariums, and other areas requiring natural history communication skills.

Required:
Leisure, Youth and Human Services: 430:050 or $\mathbf{4 3 0 : 1 4 6}$ or 43T:170

3 hours
Biology: 840:084; 840:184; 840:196. 8 hours
Biology: 840:195
OR

Biology: 840:180*
OR
Anthropology: 990:125............................................................. 3 hours
18-20 hours
*If $840: 180$ is taken to satisfy a requirement of the Natural History Interpretation Minor, it cannot also be used for credit on the Biology Major: Ecology and Systematics Emphasis.

## Combined B.A./M.S. or B.S./M.S. Program Biology

Students interested in the B.A./M.S. or B.S./M.S. in Biology should declare their intent by the middle of the junior year. The B.A./M.S. or B.S./M.S. degree program is a five-year program offered on the thesis option only, leading to both the B.A./B.S. and M.S. degrees in biology. This program prepares students for doctoral graduate studies in biology and it provides training for work as a biologist in academic, industrial, and government laboratories. Students interested in this program can declare their intent by the end of the junior year, provided they have an overall grade point average (GPA) of $\mathbf{3 . 0 0}$ or above. An Application for Admission to Graduate Study should be completed and the student's interest in the Combined B.A./M.S. or B.S./M.S. Program in Biology indicated on the application itself.

Once admitted to the program, undergraduate students (who are classified as seniors), may register for graduate credit as a senior, with the approval of the department head (see guidelines on pages 61-62). Please refer to the Biology Major in the graduate section of this catalog (page 173) for detailed information on enrollment procedures and graduate program requirements.


## Chemistry

## (College of Natural Sciences)

## www.chem.uni.edu/

P. Rider, Acting Head. D. Bartak, J. Bumpus, R. Chin, S. Coon, D. Del Carlo, J. Elbert, C. Hanson, K. Manfredi, I. Simet, N. Simet, W. Stigliani, L. Strauss, R. Wiley.

Major programs are offered by the Department of Chemistry in two baccalaureate areas: the Bachelor of Science and the Bachelor of Arts.

Students considering a chemistry major should complete two semesters of general chemistry, 860:044 and 860:048, in the freshman year. Well-prepared students may be permitted to take 860:070, an accelerated course in general chemistry, during their first semester. It is strongly recommended that chemistry majors complete requirements in mathematics and physics within the first two years.

# Bachelor of Science Degree Program 

- 126 semester hours


## Chemistry Major

The Bachelor of Science major in Chemistry is accredited by the American Chemical Society. This program is recommended for students who wish to prepare for careers as professional chemists. It also provides the most complete preparation for post-graduate study in the field of chemistry.

Required:
Mathematics: 800:060; 800:061 ............................................ 8 hours
Chemistry: 860:044 and 860:048, or 860:070; 860:110; 860:120; 860:121; 860:123; 860:132; 860:137; 860:140; 860:141; 860:143 (2 hrs.); 860:145;

Physics: 880:130 and 880:131; or 880:054 and 880:056 and one 100 -level cognate elective of at least 3 hours

8-11 hours
Elective: a chémistry lecture course carrying a physical chemistry prerequisite $\qquad$ 3 hours 63-69 hours
Notes: To satisfy American Chemical Society guidelines for certification of the Chemistry major, the two hours of $860: 180$ Undergraduate Research required for this program must be taken after completion of either 860:140 Physical Chemistry: Thermodynamics or 860:141 Physical Chemistry: Kinetics, Quantum Mechanics, and Spectroscopy. Also, the elective course should be chosen with the help of the major advisor to assure consistency on these certification guidelines of the American Chemical Society; an appropriate advanced course in another science may be included.

Students wishing to earn a non-certified Bachelor of Science degree may omit $860: 145,860: 149$, and $860: 154$, but must include 3 additional elective hours in chemistry at the 100 -level or higher.

## Emphasis-Biochemistry

The Bachelor of Science Biochemistry emphasis is accredited by the American Chemical Society. This emphasis prepares students for careers and/or advanced study in biochemistry. It also provides partial preparation appropriate for medical school and other health-related programs.

[^2]
## Emphasis-Environmental Chemistry

This emphasis prepares students for careers in the area of environat mental chemistry. This degree is also appropriate for students planniny graduate work in multidisciplinary fields including environmental science.

```
Required:
```



```
    Chemistry: 860:044 and 860:048 or 860:070; 860:120;
        860:121; 860:123; 860:132; 860:137; 860:138;
        860:140; 860:141; 860:143 (2 hrs.);
        860:180 (2 hrr.) .34-37 hours
```

Physics: 880:054; 880:056 ..... 8 hours
Environmental Science core: 830:130; 840:051;
840:052; 870:031; and one of the following:
840:151; 840:168; 870:171; 920:123 18-19 hours
Economics: 920:024* ..... 3 hours
71-75 hours

```
*Students may substitute both 920:053 and 920:054 for 920:024 if 920:123 is selected. Taking either 920:024 or both 920:053 and 920:054 will satisfy Category 5B of the Liberal Arts Core.
```


## Emphasis-Honors Research

This emphasis is available to qualified students pursuing the Bachelor of Science program by invitation at the beginning of their junior year. Completion of Honors Research requires 5 credit hours in 860:180 Undergraduate Research (at least 2 hours of which must be taken after completion of 860:140 Physical Chemistry: Thermodynamics or 860:141 Physical Chemistry: Kinetics, Quantum Mechanics, and Spectroscopy) and the writing of a senior research thesis. The research credit may be applied to the elective hours of the B.S. degree.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)
- 130 semester hours (Teaching)


## Chemistry Major

This program provides experience in all basic areas of chemistry. With appropriate choice of university electives, the B.A. Chemistry major meets the needs of pre-medical students and students preparing for additional study in related areas such as biochemistry, industrial hygiene, pharmacology and medicinal chemistry, clinical chemistry, and toxicology. It is also suitable for students who wish to combine a chemistry major with a major in another discipline.

Required:
Mathematics: 800:060 and 800:061 ...................................... 8 hours
Chemistry: 860:044 and 860:048, or 860:070; 860:1 10; 860:120; 860:121; 860:123; 860:132; 860:137;

Physics: 880:054 and 880:056; or 880:130 and


## Combined B_A./M.S. Program Chemistry

The Department of Chemistry offers a combined program leading to the Bachelor of Arts and Master of Science degrees. Proper scheduling of courses allows the program to be completed in five years. The undergraduate requirements are identical to those of the Chemistry-B.A. major listed above. Please refer to the Chemistry Major in the graduate section of this catalog (page 173) for detailed information on enrollment procedures and graduate program requirements.

## Chemistry Major-Teaching

This program provides preparation for chemistry teachers.
Required:
Chemistry: 860:044 and 860:048, or 860:070; 860:120; $860: 121 ; 860: 123 ; 860: 132 ; 860: 140$ or $860: 141$ or $860: 142$ 20-23 hours
Physics: 880:054 and 880:056; or 880:130 and 880:131........ 8 hours Methods:

Science and Science Education: 820:190; 820:193;
820:196 $\qquad$ 8 hours
Electives in chemistry beyond 860:048 or 860:070................_ 6 hours
42-45 hours

## Chemistry-Marketing Major

This program provides preparation for students interested in the sales and marketing aspects of the chemical industry.

Note: Students on this major are strongly encouraged to complete 130:108. Additional prerequisites for $130: 108$ are $150: 080,800: 072,920: 020$, and 920:070.
*All listed marketing courses have either 920:024 or 920:053 as a prerequisite. Either 920:024 or both 920:053 and 920:054 will satisfy Category 5B of the Liberal Arts Core.

## Chemistry Minor

Required:
Chemistry: 860:044 and 860:048, or 860:070 ...................... 5-8 hours
Electives in chemistry beyond 860:048 or 860:070................12-15 hours
20 hours

## Chemistry Minor-Teaching

The Chemistry-Minor-Teaching provides for second endorsement approval by the lowa Board of Educational Examiners and requires first endorsement approval (major) in another science discipline or general science.

Required:
Chemistry: 860:044 and 860:048, or 860:070; 860:063*; 860:132; 860:142 .................................... 16-19 hours
Science and Science Education: 820:190; 820:193; 820:196 8 hours 24-27 hours
*Students seeking greater familiarity with organic chemistry may substitute 860:120 and 860:123.

## Communication Studies

## (College of Humanities and Fine Arts)

## www.uni.edu/comstudy

J. Fritch, Head. R. Bankston, M. Beall, M. Bozik, J. Burtis, P. Carlin, A. Chatham-Carpenter, S. Chen, Z. Chen, R. Davilla, V. DeFrancisco, A. Dimitrova, B. Fabos, T. Hall, D. Kruckeberg, C. Martin, K. Mitchell, P. O'Connor, C. Ogbondah, C. Palczewski, G. Pohl, D. Shankar, M. Shaw, P. Siddens, L. Terlip, P. Turman, J. Morgan Witte.

Note: Students majoring in Public Relations and Electronic Media must achieve a minimum grade of $C(2.00)$ in all courses to be applied toward departmental majors or minors. To graduate with a major in Communication (Liberal Arts) a student must earn a cumulative GPA of 2.50 .
Advisory Statoment: Requirements of a Communication Studies major or minor may also be used to meet the requirements of another major or minor; but electives may not be counted toward both.

## Enrollment Management Policy

This policy applies to the following: Communication Liberal Arts Major, Communication/Public Relations Major, Communication/Electronic Media Major, Political Communication-Major, Communication Liberal Arts Minor, Business Communication Minor, Communication/Journalism Minor, and Communication/Public Relations Minor.

## Majors

1. Students may indicate their interest in majoring in a communication program any time after their admission to UNI. Formal indication of interest shall be made via the Declaration of Curriculum form at which time the student will be considered a "pre-major" and will be assigned an advisor. (For freshmen, this shall be the Communication Studies Advising Office.)
2. A student's freshman year shall be devoted primarily to course work in the Liberal Arts Core. The Liberal Arts Core load shall include 48C:001 (Oral Communication) and 620:005 or 620:015 or 620:034. Major course work shall be limited to courses as recommended by her/his freshman advisor and program policy.
3. By the end of the fall term of a student's sophomore year, pre-majors shall have completed a course major component as designated by the advisor and program policy.
4. The following criteria shall be used for determination of admission:
a. $\quad 2.70$ cumulative GPA in at least 24 hours of course work (to include 48C:001 Oral Communication and 620:005 or 620:015 or 620:034).
b. 2.50 average GPA in the designated major component for Communication Studies - Liberal Arts majors (except Political Communication), and a 2.70 average GPA in the designated major component for Public Relations and Electronic Media majors.
c. Upon satisfaction of the admission requirements (a and b above), a student shall be converted to major status after the student files a Declaration of Curriculum which will then be

Undergraduate Program Requirements
Communication Studies
processed. The student shall be notified of her/his admission.
d. Students admitted to a major shall be able to continue course work toward their major.
e. Students unable to satisfy the admission requirements and consequently denied admission shall be notified in writing.
5. Transfer students entering UNI with an associate arts (A.A.) degree shall be admitted to major status if their cumulative GPA is 2.70 or better, and upon the condition that the requirements of both 48C:001 (Oral Communication) and 620:005 or 620:015 or 620:034 were satisfied.
6. Transfer students entering UNI without an A.A. degree shall be subject to the admissions standards requirements of students beginning their higher education studies at UNI, i.e. \#4.
Designated Course Components:
A. Public Relations: 48):002, 48P:005.
B. Electronic Media: 48J:002, 48E:003.
C. Journalism: 48J:002.
D. Communication-Liberal Arts: 48C:004; 48C:006.
E. Political Communication: none.

## Minors

Admission to any Communication Minor (Liberal Arts, Business Communication, or Public Relations) or Journalism Minor requires a 2.70 cumulative GPA in at least 24 hours of course work (to include 48C:001 Oral Communication and 620:005 or 620:015 or 620:034). (Also, see 4c above.)

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)
- 130 semester hours (Teaching)


## Communication Major (Liberal Arts)

The Communication (Liberal Arts) major requires the completion of 37-43 credit hours, including a common core of 13 hours. The remainder of the major is a combination of required and elective courses specific to a selected emphasis area. Students select an emphasis area that corresponds with their career objective(s) or educational goal(s).

## Required:

Communication Studies core:
48C:001; 48C:004; 48C:006; 48C:080; 48C:195........... 13 hours
Emphasis area courses ................................................... 24-30. hours 37-43 hours
Emphasis areas include: general communication, culture and communication, interpersonal communication, organizational communication, community and communication, etc. Sample plans of study are available for these emphasis areas in the Department of Communication Studies main office.

## Communication - Theatre Major Teaching

This teaching major in communication and theatre is offered jointly by the departments of Communication Studies and Theatre.

Required:
Communication: 48C:001; 48C:004; 48C:011; 48C:015; 48C:024; 48C:031; 48C:071; 48C:074; 48C:141; 48C:187; 48C:188 31 hours
Theatre: 490:001; 490:015; 490:034 (these three courses may be taken in any sequence; all are prerequisites for 490:161); 490:108; 490:161

14 hours
Applied Activity Option: one hour from: 48C:091/48C:191 or 48C:093/48C:193 or 490:050........ 1 hour
Electives: ( 3 hours from the following) ....................................... 3 hours
Communication: 48C:108 or 48C:110; 48C:122; 48C:124; 48C:126; 48C:144; 48C:174; 48C:176; 48C:178.
Theatre: 490:040; 490:060; 490:061; other courses are a vailable, consult with your advisor.

## Communication/Electronic Media Major

Required:
Communication: 48C:128 ..... 2 hours
Electronic Media: 48E:003; 48E:011 or 48E:013 or48E:112; 48E:021; 48E:071; 48E:121; 48E:132;48E:141; 48E: 179 or 48E:197; 48E:19525 hours
Journalism: 48J:002 ..... 3 hours
Electives from the following. ..... 18 hours
Marketing": 130:101; 130:106; 130:150.
Management: 150:153.

Communication: 48C:004; 48C:011; 48C:108 or 48C:110; 48C:113; 48C:121; 48C:122; 48C:124; 48C:126; 48C:132; 48C:134; 48C:144; 48C:146; $48 \mathrm{C}: 166 ; 48 \mathrm{C}: 173 ; 48 \mathrm{C}: 176 ; 48 \mathrm{C}: 180$ or 48C: 183 or 48 C : 189.
Electronic Media: 48E:073; 48E:111; 48E:113; 48E:115; 48E:117; 48E:123; 48E:131; 48E:134; 48E:136; 48E: $138 ; 48 \mathrm{E}: 139 ; 48 \mathrm{E}: 161 ; 48 \mathrm{E}: 166 ; 48 \mathrm{E}: 171$.
Journalism: 48J:007.
48 hours
"These courses require either 920:024 or 920:053 as a prerequisite 920:024 may be used to satisfy Category 5B of the Liberal Arts Core.

## Communication/Public Relations Major

The Communication/Public Relations Major requires the completion of 18 hours in public relations, 12 hours in communication, 15 hours in journalism and 12 hours in business. (The concentration of study in business is in keeping with the specific recommendations for public relations education as outlined in The Design for Undergraduate Public Relations Education: Report of the 1987 Commission on Undergraduate Public Relations Education, co-sponsored by the Public Relations Division of the Association for Education in Journalism and Mass Communication and Public Relations Society of America and the Educators Academy of PRSA.)

## Required:

Accounting: 120:030 .................................................................... 3 hours
Marketing: 130:101*; 130:106* ........................................... 6 hours
Management: 150:153 ......................................................... 3 hours
Journalism: 48J:002; 48J:007; 48J:071; 48J:132; 48J:172 .... 15 hours
Communication: 48C:004 or 48C:173; 48C:124; $48 \mathrm{C}: 132 ; 48 \mathrm{C}: 180$ or 48C:183 or 48C: 189 12 hours
Public Relations: 48P:005; 48P:170 or 48P:184; 48P:173; 48P:182; 48P:188; 48P:190 or 48P:179/ 48P:197 (3 hrs.) 18 hours 57 hours
*These courses require 920:024 or 920:053 as a prerequisite. 920:024 will satisfy Category 5B of the Liberal Arts Core.

## Political Communication Major

Required core:
Communication: 48C:160; 48C:180 or 48C:183 or 48C:189. 6 hours
Journalism: 48J:002 ............................................................. 3 hours
Political Science: 940:111;942:150........................................ 6 hours
History: 960:116..................................................................... 3 hours
Geography: 970:114 ................................................................................ 3 hours
Internship ................................................................................... 4 hours
Communication: 48C:197 or
Political Science: 940:181.
Emphases (select two areas of focus with 5-6 hours from each area)

11-12 hours 36-37 hours
Focus Area 1: State and Local Public Affairs (6 hours)
Political Science: 942:048; 942:131; 942:132.
Focus Area 2: Political Campaigns and Elections (6 hours)
Political Science: 942:112; 942:134; 942:151.
Focus Aree 3: International Affairs (6 hours)
Political Science: 943:125; 943:143; 943:145.
Geography: 970:116.
Focus Area 4: International Communication (6 hours)
Communication: 48C:151.
Journalism: 48J:151.
Public Relations: 48P:170.
Focus Area 5: Decision-Making (5-6 hours)
Communication: 48C:128; 48C:148; 48C:178.
Focus Area 6: Political Discourse (6 hours)
Communication: 48C:113; 48C:123; 48C:172; 48C:174.
Sociology: 980:138.
Focus Area 7: Media Analysis (6 hours)
Electronic Media: 48E:021; 48E:131; 48E:139; 48E:141; 48E:161.

## Business Communication Minor

This minor in business communication is interdisciplinary in nature and offered jointly by the College of Humanities and Fine Arts and the College of Business Administration. It is under the jurisdiction of the Department of Management and the Department of Communication Studies. The minor requires a 15 -hour core plus 5-6 hours from one of three emphases.

## Required core:

Communication: 48C:071; 48C:132 ................................... 6 hours
Journalism: 48J:007 ............................................................ 3 hours
Management: 150:080
OR
English Language and Literature: 620:077 .......................... 3 hours
English Language and Literature: 620:102 or 620:104 or 620:105 3 hours
Required: 5-6 hours from one of three emphases below ...... -5-6 hours 20-21 hours

## Emphases-

## Business:

Management: 150:113; 150:114.
OR

## Communication:

Two of the following:
Communication: 48C:031; 48C:139 or 48C:141; 48C:148*.
OR
Journalism and Public Relations:
Two of the following:
Journalism: 48J:071*; 48J:172*; 48J:176*.
Public Relations: 48P:173*; 48P:184.
*These courses require additional prerequisites.
Note: When declaring this minor students must:
a) have a 2.70 cumulative GPA.
b) have satisfactorily completed Categories 1 A and 1 B of the Liberal Arts Core.

## Communication Studies Minor (Liberal Arts)

Required:
Communication: 48C:001; 48C:004; 48C:006; 48C:011
or 48C:071 ............................................................. 12 hours
Electives in 48C:xxx courses (at least 5-6 hours must be at the 100 -level)

- $8-9$ hours 20-21 hours


## Communication - Theatre Minor Teaching

This teaching minor in Communication and Theatre is offered jointly by the Departments of Communication Studies and Theatre.

[^3]
## Communication/Journalism Minor (Liberal Arts)

Required: Journalism: 48J:002; 48J:007; 48J:071; 48J:132; 48J:171; 48J:172 18 hours<br>Electives (Group A)<br>..... 3-6 hours<br>Journalism: 48J:121; 48J:151; 48J:166; 48J:176; 48J:178;48):197.<br>Electives (Group B)<br>..... 0-3 hours<br>Industrial Technology: 330:169<br>Art: 600:032<br>24 hours

Communication/Public Relations Minor
Required:
Communication: 48C:124; 48C:132 ..... 6 hours
Journalism: 48J:007 ..... 3 hours
Public Relations: 48P:005; 48P:173; 48P:182 ..... 9 hours
Electives ..... 3 hours
Communication: 48C:173; 48C:180 or 48C:183 or 48C:189Public Relations: 48P:170; 48P:184; 48P:188.

## Program Certificate

For information on the following program certificates, see pages 129 and 135 or contact the department office.

Certificate in Public Speaking Graduate Certificate in Corporate Communication

## Communicative Disorders

## (College of Humanities and Fine Arts)

## www.uni.edu/chfa

C. Highnam, Head. K. Bleile, A. Burda, C. Hageman, J. Lubker, L. Nelson, J. Olsen, B. Plakke.

## Bachelor of Arts Degree Program

- 120 semester hours


## Communicative Disorders Major

Required:
Communicative Disorders: 51C:006; 51C:106; 51C:107; 51C:111; 51C:114; 51C:125; 51C:127; 51C:151; 51C:152; 51C:155; 51C:162; 51C:164;51C:175; 51C:177; 51C:180 37 hours
Statistical Measurement: a 3-hour course in statistics selected with approval of the major academic advisor - either 250:180 or 800:072 ..... 3 hours
Additional requirements:

Students must select a minimum of 8 credit hours from Option 1 or Option 2 8 hours

Option 1. Pre-professional speech-language pathology:
Communicative Disorders: 51C:129; 51C:155; 51C:166; 51C:168
Option 2. Pre-professional audiology:
Psychology: 400:154; 400:155; 400:173.
Health Promotion and Education: 410:125. Social Work: 450:143.
Communicative Disorders: 51C:155; 51C:160; 51C:166; 51C:168; 51C:197

Students must have an overall GPA of 3.00 or consent of the depart ment head to declare a major in Communicative Disorders. Declaration of the major must occur before enrollment in 51C:151 and all accompas nying courses in that semester's sequence. Transfers into the major must have a GPA of 3.00 to be accepted into the program. An overall GPA of 3.00 must be maintained throughout the undergraduate program or approval to continue must be obtained from the department head. Student must complete 25 clock hours of supervised clinical observation prior to beginning 51C:155.

Students must receive a grade of $C$ or better in the required core courses offered by the Department of Communicative Disorders, and in the courses taken in either option, in order to receive credit toward the major. Students must repeat any major course (other than the course in statistics) for which they receive a C - or less. Any one course may be repeated once; a second failure to meet the required C grade will necessitate review and consultation with the student's advisor and the depart ment head. If a student does not attain and maintain the grade poin requirement of the department, the student's Declaration of Major will be revoked and the individual referred to the Registrar's Office as an undeclared student. All majors and all provisional majors must obtain their advisor's signature before registering for, adding, or dropping classes.

## Speech-Language-Hearing Sciences Minor

The Speech-Language-Hearing Sciences minor is intended to provide students in related fields of study with a basic understanding of speech, language and hearing from birth to senescence and the disorder of communication that arise. This minor is recommended for student who intend to work in the education, social services, or allied health professions.
Required:Communicative Disorders: 51C:006; 51C:106; 51C:107;51C:111; 51C:17513 hours
Electives: three courses from the following ..... 8 -9 hours
Communicative Disorders: 51C:114; 51C:125;51C:127;51C:162;51C:164;51C:166;51C:168;51C:177; 51C:180.

## Computer Science

## (College of Natural Sciences)

## www.cs.uni.edu/

B. Bergquist, Acting Head. J. Drake, P. East, M. Fienup, P. Gray, M. Jacobson, J. McCormick, K. O'Kane, B. Schafer, E. Wallingford.

## Notes:

1. Undergraduate students who have been admitted to the university provisionally because of non-satisfaction of the high school mathematics requirements may not enroll in any computer science credit course before this requirement has been met.
2. All courses counting toward a major or minor in computer science must be passed with a grade of C - or better.
3. Prerequisite computer science courses must be passed with a grade of $C$ before taking a subsequent course.
4. All computer science majors must complete a project course (marked with asterisk in the degree statements). The course used to meet this requirement is to be taken in the area of specialization, i.e., an area in which at least three courses are taken.
5. All courses in a prerequisite chain to a course are considered regressive to it B students may not take them for credit after passing the "later" course. Additionally, 810:030, 810:035, 810:036 are regressive to 810:063 and any course having it as prerequisite.

## Bachelor of Science Degree Program

- 126 semester hours


## Bioinformatics Major

Required:
Mathematics: 800:060; 800:061; 800:064; 800:152; 800:164 17 hours Computer Science: 810:061; 810:062; 810:065; 810:066; 810:080; 810:114; 810:115; 810:180 (1 hour)............. 24 hours Biology: 840:051; 840:052; 840:130; 840:140; 840:153....... 19 hours Chemistry: 860:070* or both 860:044 and 860:048; 860:063......................................................................-1-12 hours Elective: one course from the following........................................ 3 hours Computer Science: 810:143; 810:147; 810:153; 810:155; 810:161; 810:172; 810:181

$$
73-75 \text { hours }
$$

[^4]
## Computer Science Major

Required:
Computer Science: 810:041; 810:061; 810:062; 810:063; 810:080 18 hours
Research: 810:180 (topic pre-approved by department)
$\qquad$
Electives:
Mathematics: ( 4 courses from the following) $\qquad$ 13-14 hours 800:060; 800:061; 800:072 or 800:092; 800:076; 800:143; 800:152; 800:164; 800:169; 800:176; 800:177
Computer Science:
24-26 hours
Eight courses including a specialization of three courses from the Foundations area; a specialization of three courses from one other area; one course from each of the remaining two areas; one of the specializations must include a projects course (marked with an asterisk*).
Foundations: 810:153; 810:154; 810:155*; 810:161; 810:162*; 810:181;810:182; 810:188
Information Science: 810:112*; 810:114; 810:115; 810:116*; 810:118
Software Engineering: 810:172; 810:173*; 810:174*; 810:175*; 810:178
Systems: 810:140: 810:141; 810:142; 810:143; 810:145*; 810:147; 810:148
Electives: two additional courses selected from some of the computer science Aarea@ courses and 100 -level courses meeting the mathematics requirement. 6-8 hours 62-67 hours
*One course marked with an asterisk must be completed.

## Networking and System Administration Major

The B.S. Networking and System Administration major requires a minimum of 127 total hours to graduate.

## Required:

Industrial Technology: 330:037; 330:039; 330:041; 330:103; 330:104; 330:152; 330:156 ............................ 21 hours
Mathematics: 800:060; 800:061 ........................................... 8 hours
Computer Science: 810:041; 810:061; 810:062; 810:063; 810:080; 810:140; 810:141; 810:143; 810:147; 810:180 31 hours
Physics: 880:130, 880:131 A.
Electives: two courses from the following.....................................-7 hours
Computer Science: 810:112; 810:114;810:115; 810:116; 810:118; 810:142; 810:145; 810:148; 810:153; 810:154; 810:155; 810:161; 810:162; 810:181; 810:182; 810:188.

## Bachelor of Arts Degree Programs

- 120 semester hours


## Computer Information Systems Major

The Computer Information Systems major requires a minimum of 120 hours to graduate.

Required:
Computer Science: 810:041; 810:061; 810:062; 810:063; 810:080

18 hours

## Business core:

Accounting: 120:030; 120:031 ....................................... 6 hours
Marketing: 130:101....................................................... 3 hours
Management: 150:153................................................. 3 hours
Economics: 920:024 or 920:053 .................................... 3 hours
Electives:
Mathematics: (two courses from the following)
6-8 hours
800:060; 800:061; 800:072 or 800:092; 800:076;
800:143; 800:152; 800:164; 800:169; 800:176;
800:177
Computer Science: $\qquad$ 18-20 hours
Six courses including three courses from either the Software Engineering* or Information Science* area and one course from each of the remaining three areas.
Foundations: $810: 153 ; 810: 154 ; 810: 155 ; 810: 161$; 810:162; 810:181; 810:182; 810:188.
Information Science: 810:112*; 810:114; 810:115; 810:116*; 810:118.
Software Engineering: 810:172; 810:173*; 810:174*; 810:175*; 810:178.
Systems: 810:140; 810:141; 810:142; 810:143; 810:145; 810:147; 810:148
Electives: two additional courses selected from the above computer science courses and 100 -level mathematics courses, or 810:034 $\qquad$ 63-69 hours
*A project course (marked with asterisk) must be taken as one of three in an area of specialization.

## Computer Science Major

Required:
Computer Science: 810:041; 810:061; 810:062; 810:063; 810:080

18 hours
Electives:
Mathematics: (two courses from the following) ...............6-8 hours 800:060; 800:061; 800:072 or 800:092; 800:076; 800:143; 800:152; 800:164; 800:169; 800:176; 800:177
Select one of the following core areas as a specialty. $\qquad$ 18-20 hours Six courses* including three courses from selected specialty and one from each of the other three areas.
Foundations: 810:153; 810:154; 810:155*; 810:161; 810:162*; 810:181; 810:182; 810:188.
Information Science: 810:112*; 810:114; 810:115; 810:116*; 810:118. Software Engineering: 810:172; 810:173*; 810:174*; 810:175*; 810:178.
Systems: 810:140; $810: 141 ; 810: 142 ; 810: 143$; 810:145*; 810:147; 810:148.
Electives: one additional course selected from the above computer science courses and 100-level mathematics courses

3-4 hours 45-50 hours
*A project course (marked with asterisk) must be taken as one of three in an area of specialization.

## Computer Information Systems Minor

Required:
Computer Science: 810:034; 810:061; 810:062; 810:063;
$\qquad$
Electives 3 hours
Computer Science: 810:114; 810:115; 810:161; 810:172. 21 hours

## Computer Science Minor

Required:
Computer Science: 810:041; 810:061; 810:062; 810:063; 810:080. 18 hours
Electives: any course 810:1xx (excluding 810:151) or above ..... 9 hours
27 hours

## Program Certificate

For information on the following program certificate, see page 129 or contact the department office.

## Computer Applications

# Curriculum and Instruction 

## (College of Education)

## www.uni.edu/coe/ci

G. Stefanich, Interim Head. P. Beed, M. Betterton, M. Cai, C. Christensen, J. Cornett, J. Cryer, R. DeVries, K. Diller, J. Donaldson, R. Edmiaston, C. Ensworth, C. Erpelding, J. Finkelstein, L. Fitzgerald, B. Heitzman, M. Herring, G. Holmes, D. Landis, J. Marchesani, C. May, J. McClain, T. McDonald, K. Meredith, L. Nielsen, B. Safford, J. Schneider, D. Schumacher-Douglas, J. Smith, J. Steele, M. Stichter, D. Tallakson, D. Tidwell, R. Traw, V. Trent, T. Weih, B. Zan, L. Zeitz.

## Bachelor of Arts Degree Programs

- 130 semester hours


## Early Childhood Education MajorTeaching

This major leads to licensure for teaching young children from birth through grade 3. The student will complete the Liberal Arts Core requirements, the Professional Education Requirements, the specified major requirements, plus electives to complete a minimum of 130 hours. The prescribed program is as follows:
I. Professional Education Requirements-Early Childhood Education Required:

$$
\text { Special Education: 220:150........................................... } 2 \text { hours }
$$

Instructional Technology: 240:031 ................................ 3 hours
Human Relations: 280:070............................................. 3 hours
(Before enrolling in 280:070, the student must be fully admitted to the Teacher Education Program.)

## Level I

Educational Psychology: 200:017; 200:030 .................. 4 hours

## Level II

(Before enrolling in Level II, the student must be fully admitted to the Teacher Education Program.)

$$
\text { Educational Psychology: 200:128; 200:148 .................. } 4 \text { hours }
$$

Measurement and Research: 250:150 2 hours

## Level III

(Before enrolling in Level III, the student must be fully admitted to the Teacher Education Program.)

Social Foundations: 260:119 3 hours
Teaching: 280:132 ................................................................... hours 33 hours
II. Early Childhood Education Major Requirements Required:

Educational Psychology: 200:109 ................................ 3 hours
Elementary, Early Childhood, and Middle Level Education: 210:121; 210:130; 210:149; 210:151; 210:161; 210:164; 210:192 (2 hrs.)

20 hours
Literacy Education: 230:044; 230:115.......................... 6 hours
Design, Family and Consumer Sciences: 310:031........ 2 hours
Mathematics: 800:030; 800:134 ................................. 6 hours 37 hours
Students seeking dual endorsement, Early Childhood Education with Elementary, may do so by completing a program which includes the
following additional course work:
Elementary, Early Childhood, and Middle Level Education: 210:120; 210:152 6 hours
Literacy Education: 230:116 3 hours
Health Promotion and Education: 410:135 or
Physical Education: 420:045 or
Health, Physical Education and Leisure
Services-Interdepartmental: 440:045. $\qquad$ 2-3 hours
Elementary, Early Childhood, and Middle Level
Education: 210:123 or
Music: 520:102 or
Art: 600:090 2-3 hours
13-15 hours
A 2.50 grade index in all course work at the University of Northern lowa, and, also, a 2.50 GPA in all course work at this university and elsewhere, or the approval of the head of the Department of Curriculum and Instruction is required for registration in major courses in the department.

Students should plan their course work so that all Early Childhood courses are taken prior to student teaching. Students must have a cumulative GPA of 2.50 in order to student teach. Students should apply for their student teaching one year in advance.

## Elementary Education MajorTeaching (K-6 General Classroom Teacher)

## (Extended Program)

The student will complete the Liberal Arts Core requirements, the Professional Education Requirements, the major requirements, a 24-hour area of concentration or an endorsement minor, and electives to complete a minimum of 130-140 hours (depending on minor chosen). The prescribed program is as follows:
J. Professional Education Requirements-Elementary Education Required:

Special Education: 220:150 ........................................... 2 hours
Instructional Technology: 240:031* ............................ 3 hours
Human Relations: 280:070............................................ 3 hours.
(Before enrolling in 280:070, the student must be fully admitted to the Teacher Education Program.)

## Level I

Educational Psychology: 200:017; 200:030 .................. 4 hours Level II
(Before enrolling in Level II, the student must be fully admitted to the Teacher Education Program.)

Educational Psychology: 200:128; 200:148 .................. 4 hours
Measurement and Research: 250:150........................... 2 hours

## Level III

(Before enrolling in Level III, the student must be fully admitted to the Teacher Education Program.)

Social Foundations: 260:119 3 hours
Teaching: 280:1xx Teaching (course number denotes area in which experience is achieved: $280: 132$, 280:134, 280:135, 280:137, 280:138, 280:139, 280:140, 280:250)
II. Elementary Education Major Requirements

Required:
Elementary, Early Childhood, and Middle Level
Education: 210:120 or 210:122; 210:150 or
210:152; 210:161; 210:164................................ 12 hours
Elementary, Early Childhood, and Middle Level Education: 210:123 or
Music: 520:102 or

Literacy Education: 230:044; 230:1 15; 230:116 (Middle Level/Elementary Education double majors may substitute 230:117 for 230:116)........ 9 hours
Health Promotion and Education: 410:135 or
Physical Education: 420:045 or
Health, Physical Education and Leisure Services-
Interdepartmental: 440:045 $\qquad$ 2-3 hours
Mathematics: 800:030; 800:134 .............................. 6 hours
31-33 hours
*Students must select 240:031 in place of 240:020 in the Professional Education Requirements unless the computer requirement is addressed in a minor subject field or elective course. A 2.50 grade index in all work at the University of Northern Iowa and, also, a 2.50 GPA on all course work at this university and elsewhere, or the approval of the head of the Department of Curriculum and Instruction is required for registration in major courses in the department.

Students should plan their course work so that the following courses are taken concurrently as a profesgional semester block, prior to student teaching:

Elementary, Early Childhood, and Middle Level Education: 210:120 or 210:122; 210:161; 210:164.
Literacy Education: 230:116.
Mathematics: 800:134.
Students should apply for their professional semester in the Department of Curriculum and Instruction one year in advance. To be eligible for the courses in the Professional Semester block, students must have completed Level II of the Professional Education Requirements, a curriculum course ( $210: 150$ or $210: 152$ ), and have a cumulative 2.50 GPA .
III. Area of Concentration: Students will include either a 24 -hour area of concentration or endorsement minor. The student may choose from one of the following areas of concentration or approved university minors. In special circumstances a 24 -hour emphasis may be approved by the head of the Department of Curriculum and Instruction in an area not listed.

## Art Minor (K-6)-Teaching

Required:
Art: 600:018; 600:019; 600:026; 600:027; 600:040; 600:041; 600:091; 600:120. 23 hours
Elective in art: may include 600:002 or 600:004 6 hours 29 hours
Basic Science Minor (K-6)-Teaching
Required:
Science and Science Education: 820:031; 820:032; 820:130;820:18114 hours
Biology: 840:181 ..... 4 hours
Earth Science: 870:181 ..... 4 hours
Electives:
Chemistry or Physics (select one): 860:010 (4 hrs.);860:061; 880:0114 hours
Earth Science (select one): 870:010; 870:021; 870:031. ..... 3 hours
29 hours
Elementary School Media Specialist Minor (K-6)- Teaching

Elementary majors interested in a minor in the school media area should complete the work listed for the Library Media Specialist Mi-nor-Teaching. See page 81.

## Health Education Minor (K-6)-Teaching

Required 26 hours
(The Health Education Minor (K-6) is under the jurisdiction of the School of Health, Physical Education and Leisure, Youth and Human Services. Requirements are listed on page 93.)

## History Minor (K-6)-Teaching

Required:
Elementary, Early Childhood, and Middle Level Education: 210:143. 3 hours
History: 960:014; 960:015; 960:130; 9 hours of world history including 3 hours of European history and 3 hours of non-Western history 18 hours
$\qquad$
Mathematics Minor (K-6)_Teaching
Required:
One of the following three Liberal Arts Core courses ......... 3 hours Mathematics: 800:023; 800:072; 800:092. Mathematics: 800:030; 800:037; 800:111; 800:112; 800:113; 800:114. 20 hours
One of the following two courses.o.an............................................. 1 hour Mathematics: 800:137; 800:192

24 hours

## Modern Languages Minor (K-6)_Teaching <br> Required <br> 29 hours

(These emphases are under the jurisdiction of the Department of Modern Languages and requirements are on pages 112-113. Minord can be selected from French, German, Portuguese, Russian, and Spanish.)

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Physical Education Minor (K-6)-Teaching
Required
(The K-6 Physical Education Minor is under the jurisdiction of the School of Health, Physical Education and Leisure Services. Requirements are listed on page 95.)
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## Social Studies Minor (K-6)-Teaching

Required:
Elementary, Early Childhood, and Middle Level Education:
210:143.
3 hours

Completion of 21 hours in social studies to include course work from at least 3 of the following areas: ... 21 hours Psychology: 400:xxx
Economics: 920:xxx
American Government: 942:xxx
History: 960:xxx
Geography: 970:xxx
Sociology: 980:xxx
In addition to the course work in three areas above, courses may be taken from:

Social Science: 900:xxx
Anthropology: 990:xxx
$\overline{24}$ hours

## Special Education Minor-Teaching

Required 24 hours
(The Instructional Strategist I: Mild/Moderate K-6 emphasis is under the jurisdiction of the Department of Special Education, and requirements are listed on page 126.)

## Middle Level Education Dual MajorTeaching

This major is designed to prepare students to teach young adolescents at the middle level of education (grades 5-8). This is a dual major and must be combined with either an elementary or secondary education teaching major. This major leads to State of Iowa Middle Level endorsement for teaching math, science, social studies and language arts in grades 5-8. Students will complete Liberal Arts Core requirements, the Professional Education Requirements, major requirements for middle level education, major requirements for elementary or secondary education, and endorsement requirements for middle school teacher.

## Required:

> Educational Psychology: 200:116. 2 hours

Middle Level Education: 210:122; 210:135; 210:150............. 9 hours
Methods courses in at least two content areas ..................... 6 hours
Required: Literacy Education: 230:116 or 230:117
Courses selected with approval of advisor..no............................. 13 hours 30 hours
The student teaching semester will include two experiences, one in either an elementary or secondary classroom and the other in a junior high or middle school classroom. Students enroll for 280:137 and 280:134 or 280:138 for a total of 12 hours. The program should be planned so the following courses are completed after Level II of the Professional Education Requirements and prior to student teaching: 210:122; 210:135; 210:150; and methods courses in two content areas.

Students will complete a minimum of 12 hours of course work in two subject area concentrations and 6 hours of course work in two other subject area concentrations. Subject area concentrations must include course work that is broad, multidisciplinary, and encompass the major areas within the field; are limited to the following four areas; and must include the specified course work.


Some or all of this course work may be completed as part of the Liberal Arts Core requirements. Students should contact their advisor, the College of Education Advising Center, and the undergraduate record analyst in the Registrar's Office to determine specific courses required for the endorsement.

# Library Media Specialist MinorTeaching 

## Required:

Instructional Technology: 240:150 ..................................... 3 hours
School Library Media: 350:115; 350:121; 350:132 (for K-6
endorsement) or 350:134 (for 7-12 endorsement);
350:223; 350:225; 350:250; 350:290 (3 hrs.)....o.o.o.o.e.s 21 hours
24 hours
Persons completing this program are eligible for either the K-6 or the 7-12 media specialist endorsement, depending on the level of basic teaching license.

This minor includes graduate credits and will require students to enroll as graduate students for those credits. Graduate credit will not be awarded unless the student is admitted to graduate study.

## Instructional Technology Minor



## Literacy Education Minor-Teaching

Required:
Literacy Education: 230:044 or 620:165*; 230:115, 230:116, or $230: 117 ; 230: 119 ; 230: 121 ; 230: 140 ;$ 230:193 (1 hr.) 16 hours Electives (must be approved by program advisor)....................6-7 hours

Literacy Education: 230:147; 230:155 (1 hr.); 230:192
Theatre: 490:101
English, Language and Literature: 620:040; 620:053;
620:055; 620:103; 620:104; 620:165*; 620:193
Linguistics: 630:130.

$$
\overline{22-23} \text { hours }
$$

*Course may be taken for elective credit if not taken to fulfill core course requirements.

In order to declare the Literacy Education Minor, a student must have a cumulative and UNI GPA of 3.00 or higher. To continue in the minor, students must earn a grade of $A B @$ or above in minor courses numbered 230:119 or above and maintain a cumulative and UNI GPA of 3.00 or higher.

Persons selecting this program may be eligible for the State of Iowa Reading K-6, English/Language Arts K-6, and/or Reading 7-12 teaching endorsements, depending on their choice of electives. Completing endorsement requirements may require more than the 22 credit hours required for the minor.

## Media Minor

Required:
Instructional Technology: 240:138; 240:139 6 hours
Electives:
12 hours

Instructional Technology: 240:147: 240:150; 240:153; 240:160 (sections 1-4); 240:170

## Design, Family and Consumer Sciences

## (College of Social and Behavioral Sciences)

## http://fp.uni.edu/dfes

H. Barnes, Head. C. Barrientes, B. Bass, G. Betrabet-Gulwadi, W. Fleming, G. Gute, K. Kostelecky, A. Lynch, M. Radina, M. Story, M. Strauss, M. Widmer.

## Bachelor of Arts Degree Programs

- 120 semester hours


## Family Services Major

Required:
Design, Family and Consumer Sciences: 31F:020; 31F:030 or 3 hours social science research methods; 31F:057; 31F:178

12 hours
Choose one course from each of the following groups: Group 1
ducational Psychology: 200:030. Design, Family and Consumer Sciences: 31F:055. Psychology: 400:120.
Group 2
Design, Family and Consumer Sciences: 31F:054
or 31F:077 or 31F:162 or 31F:177 or 31F:191. Political Science: 942:142.
Group 3
3 hours
Design, Family and Consumer Sciences:
31F:150 or 31F:153 or 31F:155 or 31F:157.

Design, Family and Consumer Sciences: 31F:010 or 31F:060 or 31F:130 or 31F: 190.
Group 5 3 hours
Psychology: 400:060.
Social Work: 450:045 or 450:142 or 450:163. Humanities: 680:156.
Choose 9 additional hours from Groups 2, 3, and 4............. 9 hours
Choose Option A or B..
Option A: 31F:195.
Option B: 9 additional hours from Groups 2, 3, and/or 4.

45 hours
A minimum of 2.40 cumulative grade point average (GPA) and department approval is required for declaration of this major. Procedures for approval are available in the departmental office. Students must maintain at least a 2.40 GPA and have department approval in order to
register for 31F:157, 31F:190, 31F:195, and to graduate. Students must achieve a minimum of C - in all courses required for the major.

## Interior Design Major

Admission to the University of Northern Iowa with an intended Interior Design major does not guarantee placement in the major due to the limited number of spaces available in the studio facilities.

Students majoring in Interior Design must satisfy the admissiot requirements including GPA, portfolio review, interview and the compl tion of specified courses before they can officially declare the major. A copy of the Admission Policy may be obtained from the Department of Design, Family and Consumer Sciences office in Latham Hall. Prior to completion of the admission requirements, students may sign an intent to major in Interior Design and be classified as a prospective (pre)majo

Students much achieve a minimum of C - in all courses required for the Interior Design major whether taken at UNI or transferred from another institution. A C- or better must be achieved in all prerequisit before a student may enroll in the next sequenced course.

If a major class is dropped after the first week of classes or a grady of less than a C- is achieved in any course applied to the major, a studend will subsequently be allowed to register to retake that course only after all advanced registration is completed and if openings are still available. A major course may be repeated only once.

The Interior Design major requires a minimum of 121 hours to graduate.

Required:
Design, Family and Consumer Sciences: 311:061; 311:063; 311:064; 311:066; 311:067; 311:068; 311:075; 311:125; 311:126; 311:127; 311:128; 311:129; 311:164; 31I:184 (2 hrs.); 31I:195; 31T:013................................. 52 hours
Marketing: 130:101 ...o.o.o.o.do.o.o.ooo.ooo.o...................................... 3 hours
Management: 150:080 .............................................................. 3 hours

One of the following 3 hours
Accounting: 120:030.
Marketing: 130:106; 130:150; 130:153; 130:166; 130:178.
Management: 150:153.
64 hours

## Textile and Apparel (TAPP) Major

Required:
Design, Family and Consumer Sciences: 31T:011; 31T:012;
31T:013; 31T:014; 31T:020; 31T:100; 31T:114; 31T:115; 31T:116; 31T:121;31T:122; 31T:123; 31T:124; 31T:185; 31T:195 45 hours
Design, Family and Consumer Sciences: 31T:015 or 31T:119 or 31T:184 (3 hrs.) 3 hours
Marketing: 130:101.............................................................. 3 hours
Economics: 920:024 ............................................................... 3 hours

Accounting: 120:030
Marketing: 130:106; 130:166
Management: 150:153.
60 houfs

## Gerontology Major

This interdisciplinary program is offered jointly by the College of Social and Behavioral Sciences, the College of Education, and the Colleg: of Humanities and Fine Arts. It is administered through the Department
of Design, Family and Consumer Sciences and under the supervision of the Gerontology Advisory Committee.

We suggest students take 400:001, 450:041, and 980:001 as their Social Sciences area Liberal Arts Core, as these are prerequisites for several of the required courses in this major.

## Social Sciences Track

Required:

> Minimum of 3 hours of research methods from:
> Design, Family and Consumer Sciences: 31F:030
> Leisure, Youth and Human Services: 430:169
> Psychology: 400:101
> Sociology: 980:108
> Gerontology core: 9 hours from the following .................. 9 hours
> *Design, Family and Consumer Sciences: 31F:150
> *Psychology: 400:173
> *Health Promotion and Education: 410:125
> * *Sociology: 980:125.
> In consultation with your advisor, choose a total of 21 credits from the following 4 groups, with at least 3 credits required from each group. ..onomonomonomonomon. 21 hours

Group I - Humanities and Aging (3-12 Hours)
History: 960:150
Religion: 640:194
Philosophy: 650:050 or 650:142; 650:194
Group II-Behavioral/Social Sciences and Aging
(3-12 Hours)
Design, Family and Consumer Sciences: 31F:055; 31F:150*
Psychology: 400:120; 400:173*
Sociology: 980:125*
Anthropology: 990:152
Group III - Physical/Health Sciences and Aging
(3-12 Hours)
Design, Family and Consumer Sciences: 31F:057; 310:130
Health Promotion and Education: 410:125*
Physical Education: 420:020
Religion: 640:173
OR
Philosophy: 650:173
Group IV - Related Social Sciences and Aging
(3-9 Hours)
Design, Family and Consumer Sciences: 31F:162
Social Worke 450:173; 450:174
*Courses may be used to meet requirements in either
Gerontology Core or Curriculum Cluster, but not both. Internship
. 4 hours
Senior Seminar Design, Family and Consumer Sciences: 31G:193
Design, Family and Consumer Sciences: 31G:195, Section 1
OR
Health Promotion and Education: 410:168
OR
Sociology: 980:184
Total required in Social Sciences Track $\quad \overline{37-38}$ hours** **Due to prerequisites for courses in Group IV, the total number of credit hours required to complete this major may be 40-41.

## Long Term Care Track

Required:
Business Management, Accounting, Business .................... 10 hours
Select at least 3 credits:
Accounting: 120:030; 120:031.
Select at least 3 credits:
Management: $150: 100 ; 150: 101 ; 150: 102 ; 150: 105 ;$ 150:153; 150:166.
Gerontology core: 9 hours from the following .................... 9 hours
Design, Family and Consumer Sciences: 31 F:150.
Psychology: 400:173.
Health Promotion and Education: 410:125.
Sociology: 980:125.
Health Care Administration. 14 hours
Design, Family and Consumer Sciences: 31G:184.
Health Promotion and Education: 410:060.
Social Work: 450:172; 450:173.
Religion: 640:173
OR
Philosophy: 650:173.
Electives approved by advisor. $\qquad$ 5 hours
Internship 4-13 hours
Students complete the seminar and either internship:
Senior Seminar Design, Family and Consumer Sciences: 31G:193 or 410:193 or 980:193.
Design, Family and Consumer Sciences: 31G:195, section 2 (maximum 12 hours)
OR
Health Promotion and Education: 410:168 (maximum 12 hours)
OR
Internship Design, Family and Consumer Seiences: 31G:195, section 2
OR
Health Promotion and Education: 410:168
OR
Sociology: 980:184

## Total required in Long Term Track 42-51 hours

## Family Studies Minor

Required:
Design, Family and Consumer Sciences: 31F:020; 31 F:030 or 3 hours of social science research methods; 31F:055 or 200:030 or 400:120; 31F:057 ................... 12 hours

Design, Family and Consumer Sciences: 31F:010;
31F:077; 31F:130; 31F:150; 31F:153; 31F:155; 31F:157; 31F:162; 31F:177; 31F:184 (3 hrs.)

21 hours

## Textile and Apparel Minor

This minor is offered by the Textile and Apparel program housed in the Department of Design, Family and Consumer Sciences.

[^5]
## Program Certificate

For information on the following program certificates, refer to page 129 or contact the Department of Design, Family and Consumer Sciences.

## Certificate Program in Long Term Care <br> Gerontology Certificate

## Earth Science

## (College of Natural Sciences)

## www.earth.uni.adu

J. Walters, Head. L. Brant, T. Cooney, A. Czarnetzki, K. De Nault, J. Gale, J. Groves, T. Hockey, M. Iqbal, S. Morgan.

Major programs are offered by the Department of Earth Science in two baccalaureate areas: the Bachelor of Arts and the Bachelor of Science. The Bachelor of Science program is recommended for most students who wish to prepare for careers as professional geologists and who plan to enter graduate school in geology. The Bachelor of Arts Degree-Geology Major provides a wider choice of electives than the Bachelor of Science Degree-Geology Major. With the appropriate choice of electives, the B.A. geology program can meet the needs of students preparing for additional study in selected fields of geology, paleontology, and related earth science areas. The B.A. Earth'Science Major-Teaching is designed to prepare secondary earth science teachers. A B.A. earth science program is also available as a liberal arts major.

## Bachelor of Science Degree Program <br> -126 semester hours

## Geology Major

Required:
Geology: 870:031; 870:035; 870:125; 870:129; 870:130; $870: 131 ; 870: 135 ; 870: 136 ; 870: 141 ; 870: 142$ or 870:143; 870:180 ( 2 hrs .); Summer Field Course ( 6 hrs.)* ........................................................ 43 hours
Required cognate areas: Mathematics: 800:060; 800:061 ........................................... 8 hours
Mathematics/Computer Science: one of the following courses: 800:072; 800:092; 800:172; 810:030; 810:035......................................................................... 3 hours Chemistry: 860:044 and 860:048, or 860:070 .................... 5-8 hours Physics: 880:054 and 880:056 and one 100-level cognate** elective, or 880:130 and 880:131............ 8-11 hours 67-73 hours
*Summer field course requirements to be met by credit earned at a field camp approved by the department.
**A 100-level course in a cognate area is required unless met by taking 880:131. Cognate areas for the B.S. degree program in geology are understood to include astronomy, biology, chemistry, geography, mathematics, computer science, physics, meteorology, oceanography, and science. Specific cognate courses must be approved by the advisor and department head.

# Bachelor of Arts Degree Programs 

- 120 semester hours (Liberal Arts)
- 130 semester hours (Teaching)


## Earth Science Major

Required: Mathematics: 800:046 or 800:060 ........................................ 4 hours<br>Chemistry: 860:044 or 860:061 4 hours<br>Earth Science: 870:010*; 870:021; 870:031; 870:035 ........... 15 hours<br>Physics: 880:054 ................................................................... 4 hours<br>Electives in earth science: 100 -level courses** .......................... 18 hours 45 hours<br>*870:010 must be taken for four semester hours of credit.<br>** 100 -level credits in earth science must include at least one course from each of astronomy, geology, and meteorology. In addition, at least 2 houry must be from either $870: 137,870: 179,870: 180,870: 195$, or another appropriate "experiential learning" course approved by the student's advisod and the department head.

## Earth Science Major - Interpretive Naturalist Emphasis

This program is designed to prepare students with an earth scienat background to work as professional interpreters with park systems, nature centers, museums, and other areas requiring field skills in the natural sciences and natural history communication skills. The B.A. Earth Sciencal degree provides students a sound subject matter foundation in geology meteorology, and astronomy. The emphasis enhances this background with biology and interpretive techniques.

[^6]
## Geology Major With Environmental Science Emphasis

The Geology Major with Environmental Science Emphasis requires a minimum of $120-122$ hours to graduate.
Required:
Mathematics: one of the following courses: 800:046;800:060; 800:072; 800:092; or 800:172 ..o..................... 3-4 hours
Chemistry: 860:044 and 860:048, or 860:070

$\qquad$ ..... 5-8 hours
Earth Science: 870:031; 870:035; 870:129; 870:130; 870:131; 870:135; 870:136 ..... 24 hours
Physics: 880:054 and 880:056, or 880:130 and 880:131 ..... 8 hours
Economics: 920:024 ..... 3 hours
Required environmental science core:
Environmental Science: 830:130 ..... 3 hours
Biology: 840:051; 840:052. ..... 8 hours
Earth Science: 870:171 ..... 3 hours
Two additional environmental courses as appropriate to the student's program and approved by the advisor and department head. 6-8 hours
Summer field course* ..... 6 hours
69-75 hours*Summer field course requirements to be met by credit earned at fieldcamp approved by the department.
Geology Major
Required:
Mathematics: one of the following courses: 800:046;
800:060; 800:072; 800:092; or 800:172 ... ..... 3-4 hours
Chemistry: 860:044 and 860:048, or 860:070 ..... 5-8 hours
Earth Science: 870:031; 870:035; 870:129; 870:130; 870:131; 870:135; 870:136 ..... 24 hours
Physics: 880:054 and 880:056, or 880:130 and 880:131. ..... 8 hours
Summer field course* ..... 6 hours
Electives in geology (100-level) ..... 4 hours
*Summer field course requirements to be met by credit earned at fieldcamp approved by the department.Recommended general electives - Mathematics: 800:060; 800:061.
Astronomy Minor
Required:
Mathematics: 800:060; 800:061

$\qquad$
8 hours
Earth Science: 870:010*; 870:151; 870:152 or 870:153; 870:154 ..... 10 hours
Physics: 880:130; 880:131 ..... 26 hours
*870:010 must be taken for four semester hours of credit.
Earth Science Minor
Required: courses in earth science ..... 20 hours
Earth Science Minor-Teaching
Required:
Chemistry:860:044 ..... 4 hours
Earth Science: 870:010*; 870:021; 870:022; 870:031; 870:035. ..... 16 hours
Physics: 880:054 4 hours ..... 24 hours

Also required: a teaching major or minor in biology, chemistry, physics, or science.

Completion of this minor will satisfy the requirements of the Iowa Department of Education for Earth Science approval (effective October 1,1988 ) only if the student has completed 30 semester hours in the broad area of science.
*870:010 must be taken for four semester hours of credit.

## Geology Minor

## Required:

Chemistry: 860:044. 4 hours
Earth Science: 870:031; 870:035; 870:125 or 870:136; 870:129 or 870:141;870:130;870:131; 4-5 hours of 100-level
Electives in geology ................................................................................. 24 hours
28 hours

## Meteorology Minor

Required:
Mathematics: 800:060............................................................. 4 hours

Earth Science: 870:021; 870:121; 870:122; 870:123 ............ 14 hours
Physics: 880:054 .................................................................... 4 hours
Geography: 970:127 or 970:164 .......................................... 3 hours
29 hours
Recommended general electives - Mathematics: 800:061; 800:062.

## Economics

## (College of Business Administration)

## www.cha.uni.edu/economics

F. Abraham, Head. M. Alam, S. Amin, K. Brown, J. Fuhrman, D. Hakes, H. Isakson, L. Jepsem, B. Kanago, B. Mardis, K. McCormick, A. Parkes, B. Uyar.

1) To graduate with a major in economics a student must:
a) complete $920: 053,920: 054,920: 103$, and $920: 104$ with at least a C- in each course whether taken at UNI or at an institution from which transfer credit for these courses is accepted; and
b) earn a 2.50 grade point average for all 920 :xxx courses taken at UNI, except 920:020, 920:024, and 920:070.
2) 920:020 and 920:070 count toward an economics major only in the business emphasis and do not count toward the minor.
3) $920: 024$ does not count toward the economics major or minor.
4) $920: 053$ and $920: 054$ are minimum prerequisites for all 100 g courses.
5) It is recommended that 920:103 and 920:104 be taken before other advanced courses in economics.
6) Not more than one emphasis may be declared in economics.

The Economics Department may impose additional admission requirements for students wishing to declare a minor or a second CBA major. Eligibility to declare a minor or a second CBA major is based on competitive GPA and space availability. Students may obtain a copy of these requirements from the Advising and Student Services Office (CBB 321B) in the College of Business Administration.

## Bachelor of Arts Degree Programs

\author{

- 120 semester hours
}


## Economics Major

Required:
Economics: 920:053; 920:054; 920:103; 920:104; 920:169*; 920:181 ....................................................................... 18 hours
Emphasis requirements (students choose one area of emphasis) 18-39 hours 36-57 hours

## Emphases:

1. General Economics ( 18 hours) Electives: 100-level economics courses ................................ 18 hours
2. Quantitative Techniques ( 33 hours) Required:

Mathematics: 800:060; 800:061; 800:062; 800:050 or 800:076 15 hours
Electives: 100-level economics courses .............................. 15 hours 33 hours
3. Business Analysis (39 hours)

Students who select this emphasis must satisfy the College of Business Administration (CBA) admission requirements before they can officially declare their major. A copy of the Admission, Retention, and Graduation Policy may be obtained from the Advising and Student Services Office in the College of Business Administration. Prior to completion of the admission requirements, students may sign an intent to major in Economics/Business Analysis and be classified as a prospective (pre)major. Pre-Economics/Business Analysis majors may enroll in lower division (below 100) business courses only. Enrollment in upper division ( 100 -level) business courses requires satisfactory completion of the CBA admission requirements and any course prerequisites.

Economics/Business Analysis majors may declare a double major, and/or major and minor within the College of Business Administration, subject to the regulations of those CBA departments affected. Economics/Business Analysis majors minoring within the CBA must select minors designated for business majors.

To graduate with an Economics/Business Analysis major from the College of Business Administration, a student must earn at least $50 \%$ of the business credit hours required for the major at UNI. Students must take at least $50 \%$ of the course work required for the degree outside the College of Business Administration. Up to nine hours of economics (excluding 920:020), and six hours of statistics may be counted as outside the College of Business Administration. A student must also complete 920:053, 920:054, 920:103, and 920: 104 with at least a C- in each course whether taken at UNI or an institution from which transfer crredit for these courses is accepted; must earn a 2.20 cumulative grade point average at UNl; must earn an overall 2.20 grade point average in 120:xax, 130:xxx, 150:xxx, 160 : xxx, and 920:xxox courses taken at UNI; and earn a 2.50 or better, in all 920:00x courses taken at UNI excluding 920:020, 920:024, and 920:070. Students given permission to graduate out-of-residence must earn a 2.20 or better in all courses approved and accepted for out-of-residence credit.

## Required business core:

Accounting: 120:030; 120:031 ..... 6 hours
Marketing: 130:101. ..... 3 hours
Management: 150:080; 150:100; 150:153; 150:154; 150:175
Finance: 160:151 ..... 3 hours
Economics: 920:020*; 920:070* ..... 6 hours
Electives: 100 -level economics courses. ..... 6 hours4. Community Economic Development Emphasis (24 hours)
Required:
Economics: 920:125; 920:148; 920:177 (3 hrs.) ..... 9 hours
Geography: 970:101 ..... 3 hours
Management: 150:080 ..... 3 hours
Marketing: 130:101 ..... 3 hours
Electives ( 6 hours from the following) ..... 6 hours
Accounting: 120:030.
Finance: 160:140.
Economics: 920:113; 920:117; 920:123.
Political Science: 942:048; 942:132Geography: 970:121; 970:164.
24 hours*These courses require an additional prerequisite which will be met bytaking 800:072, which will also satisfy Category 1C of the Liberal Arts Core.

## Economics Minor-Liberal Arts

Required:
Economics: 920:053; 920:054; 920:103; 920:104 ................ 12 hours
Electives: 100-level economics courses (920:103 and 920:104 recommended to be taken before other advanced courses in economics).

6 hours 18 hours
Available to all UNI majors, except economics majors.
Note: 920:053 and 920:054 are prerequisites for all 100 g economid courses.

## Economics Minor-Teaching

Required:
Methods: 900:190; 900:191 4 hours Economics: 920:053; 920:054; 920:103; 920:104 ................ 12 hours
Electives: 100-level economics courses (920:103 and 920:104 recommended to be taken before other advanced courses in economics)

12 hours 28 hours
Note: 920:053 and 920:054 are prerequisites for all 100 g economich courses.

## Educational Leadership, Counseling, and Postsecondary Education

## (College of Education)

## www.uni.edu/coe/elcpe

J. Smith, Interim Head. C. Bair, R. Clemente, R. Decker, D. Else, D. Engelbrecht, W. Hoskins, G. Perreault, C. Phillips, G. Reed, V. Robinson, A. Vernon, M. Waggoner, K. Vess.

There are no undergraduate majors or minors in the Department of Educational Leadership, Counseling, and Postsecondary Education. See the graduate section of this catalog for programs within this departmenf jurisdiction.

# Educational Psychology and Foundations 

## (College of Education)

## www.uni.edu/coe/epf

J. Smith, Interim Head. R. Al-Mabuk, T. Berg R. Boody, L. Brown, D. Deemer, K. East, M. Fanelli, S. Fortgang, S. Freedman, S. Gable, A. Gabriele, C. Haselhuhn, J. Henning, M. Heston, E. Joram, K. Knesting, C. Means, B. Reppas, B. Rogers, R. Scott, K. Turk, L. Upham. B. Wilson.

There are no undergraduate majors or minors in the Department of Educational Psychology and Foundations. See the graduate section of this catalog for programs within this department's jurisdiction.

## English Language and Literature

## (College of Humanities and Fine Arts)

## www.uni.edu/english

J. Copeland, Head. K. Baughman, W. Broz, G. Cawelti, J. Davis, S. Gaies, S. Gladden, V. Gotera, T. Gregersen, J. Husband, M. Janopoulos, J. Klinkowitz, B. Lounsberry, C. MacGillivray, A. Meier, J. Milambiling, P. Mvuyekure, A. Myles, J. O'Loughlin, N. Price, J. Robbins, C. Roberts, S. Rochette-Crawley, J. Swan, J. Swope, G. Tracey, K. Tracey, R. Utz, W. Williamson.

## Bachelor of Arts Degree <br> Programs

- 120 semester hours (Liberal Arts)
- 130 semester hours (Teaching)


## English Major

Required:
English: 620:034; 620:040; 620:042; 620:043; 620:053 ....... 15 hours
One of the following............................................................ 3 hours
English: 620:102; 620:103; 620:104; 620:105; 620:163; 620:174; 620:175;
or
Journalism: 48J:171.
TESOL/Applied Linguistics: 630:125 or 630:130.................. 3 hours
Electives in English literature, at least two courses from
$\qquad$ 18 hours
*Within each group, other appropriate topics may be offered in sections of $620: 150,620: 159,620: 186$, and 620:188.
*Group A. Literature in English to 1800:
620:1 13; 620:116; 620:117; 620:144; 620:147; 620:148; 620:151.
*Group B. Literature in English since 1800:
620:115; 620:118; 620:119; 620:120; 620:121;
620:123; 620:124; 620:126; 620:134; 620:153; 620:156.
*Group C. Literary Theory, Film, Cross-Cultural: 620:128; 620:139; 620:142; 620:155; 620:157; 620:158; 620:161; 620:172; 620:182; 620:184.
Electives in English language, literature or writing $\qquad$ 3 hours 42 hours

## English Major-Teaching



49 hours
Note: Prerequisites for student teaching in English are a grade point average of 2.50 in English major courses and a grade of $C$ or better in 620:190.

## Teaching English to Speakers of Other Languages (TESOL) Major

Required:
English: literature core-at least one course from each
$\qquad$ 9 hours
a. $620: 034$
b. $\mathbf{6 2 0 : 0 4 2}$ or $\mathbf{6 2 0 : 0 5 3}$
c. $\mathbf{6 2 0 : 0 4 0}$ or $\mathbf{6 2 0 : 0 4 3}$ or $\mathbf{6 2 0 : 0 5 3}$

Note: 620:053 may be used for " $b$ " or " $c$ " but not both.
English: one of the following: 620:103; $620: 104 ; 620: 105$; 620:193

3 hours
TESOL/Applied Linguistics:
630:125 or $630: 130 ; 630: 135$ or $630: 160$. $\qquad$ 6 hours
630:154; 630:156; 630:165; 630:192; 630:193; 630:194; 630:196.

21 hours
Electives in literature or TESOL/Applied Linguistics.......o......... $\frac{3}{}$ hours
42 hours
Note: International students must have achieved a TOEFL paper-based score of $600 /$ computer-based score of $\mathbf{2 5 0}$ or the equivalent in order to demonstrate their proficiency in English.

It is strongly recommended that native speakers of English majoring in TESOL programs demonstrate a basic competence in a foreign language either by obtaining at least a $C$ grade in the second semester of a language course or by passing a proficiency examination.

## Teaching English to Speakers of Other Languages (TESOL) MajorTeaching

Student teaching at both the K-6 and 7-12 levels is required to earn the ESL K-12 endorsement on an Iowa teaching license.

## Required:

English: literature core-at least one course from each group
... 9 hours
a. $620: 034$
b. $\mathbf{6 2 0 : 0 4 2}$ or $\mathbf{6 2 0 : 0 5 3}$ c. $\mathbf{6 2 0 : 0 4 0}$ or $\mathbf{6 2 0 : 0 4 3}$ or 620:053

Note: 620:053 may be used for " $b$ " or " $c$ " but not both.
English: one of the following: 620:103; 620:104; 620:105; 620:193...................................................................................... 3 hours
TESOL/Applied Linguistics:
630:125 or $630: 130 ; 630: 135$ or $630: 160$. $\qquad$ 6 hours

$$
630: 154 ; 630: 156 ; 630: 165 ; 630: 192 ; 630: 193
$$ 630:194; 630:196. 21 hours

Electives in literature or TESOL/Applied Linguistics.on................... $\frac{3}{4}$ hours
42 hours
Note: International students must have achieved a TOEFL paper-based score of $600 /$ computer-based score of 250 or the equivalent in order to demonstrate their proficiency in English.

It is strongly recommended that native speakers of English majoring in TESOL programs demonstrate a basic competence in a foreign language either by obtaining at least a $C$ grade in the second semester of a language course or by passing a proficiency examination.

## English Minor

Choose ONE option - 24 hours

## 1. Literary Studies Option

Required:
English: 620:034; 620:042 .................................................... 6 hours
English: two of the following - 620:040, 620:043, 620:053 .. 6 hours
TESOL/Applied Linguistics: 630:125 or 630:130 ................. 3 hours
Electives in English literature, at least one course from

*Within each group, other appropriate topics may be offered in sections of $620: 150 ; 620: 159,620: 186$, and 620:188.
*Group A. Literature in English to 1800:
620:113; 620:116; 620:117; 620:144; 620:147; 620:148; 620:151.
*Group B. Literature in English since 1800: 620:115; 620:118; 620:119; 620:120; 620:121; 620:123; 620:124; 620:126; 620:134; 620:153; 620:156.
*Group C. Literary Theory, Film, Cross-Cultural: 620:128; 620:139; 620:142; 620:155; 620:157; 620:158; 620:161; 620:172; 620:182; 620:184. 24 hours

## 2. Film Studies Option

Required:
English: 620:035; 620:139; 620:142; 620:182 ..................... 12 hours
English electives - literature in English .onescononecoconemenomesomen 3-12 hours
Electives in film or media production from departments other than English. ...0-9 hours
Elective in a studio or performance course in art, music or theatre (including interpreters theatre).............................0-3 hours 24 hours

## English Minor-Teaching

Required:
English: 620:034; 620:040; 620:042; 620:043; 620:053 ....... 15 hours
TESOL/Applied Linguistics: 630:130...................................... 3 hours
Literacy Education: 230:117 ................................................... 3 hours
Communication: 48C:001 ...................................................... 3 hours
English Language and Literature: 620:165; 620:190; 620:193.

2 hours
33 hours
A minimum cumulative grade point average of 2.40 in courses taken to complete this minor is required.

## Teaching English to Speakers of Other Languages (TESOL) Minor

Required:
TESOL/Applied Linguistics: 630:125 or 630:130; 630:135 or $630: 160 ; 630: 154 ; 630: 165 ; 630: 192 ; 630: 193$; 630:194; 630:196...........есо................................................ 24 hours

## Teaching English to Speakers of Other Languages (TESOL) MinorTeaching

Required:

> TESOL/Applied Linguistics: 630:125 or 630:130; 630:135 or $630: 160 ; 630: 154 ; 630: 165 ; 630: 192 ; 630: 193$; 630:194; 630:196. . 24 hours

Note: To earn the ESL K-12 endorsement on an Iowa teaching license-1 student teaching in ESL classrooms at both the K-6 and 7-12 levels is required.

## Writing Minor

Required:

$$
\text { Choose ONE option-18 or } 24 \text { hours }
$$

## 1. Creative Writing Option

## English:

$$
\text { 620:031 or 620:034 .......................................................... } 3 \text { hours }
$$

620:070 and/or 620:071 ..... 3-6 hours
620:108 and/or 620:109 ..... 3-6 hours
620:174 and/or 620:175. ..... 3-6 hours
Elective in a studio or performance course in art, music,or theatre.Elective(s) in creative writing and/or literature, includingliterature in a language other than English.
$\qquad$ . $0-6$ hours 18 hours

## 2. Professional Writing Option

English: 620:077; 620:102; 620:104; 620:105; 620:107; $620: 163 ; 620: 177 ; 620: 179$ or $620: 197$ 24 hours

# English/Modern Language Programs 

## TESOL/Modern Language MajorTeaching

## (Extended Program)

This major requires a minimum of 137 total hours to graduate. Student teaching at both the K-6 and 7-12 levels is required to earn the ESL K -12 endorsement on an Iowa teaching license.

Required:
English: 620:034; one of the following - 620:103; 620:104; 620:105; 620:193

6 hours
TESOL/Applied Linguistics: 630:125 or 630:130; 630:135 or $630: 160 ; 630: 154 ; 630: 165 ; 630: 192 ; 630: 193$; 630:194; 630:196 24 hours
30 hours from one of the language emphases below......... 30 hours 60 hours

## Emphases-

## French:

Languages: 700:190.
French: 720:011; 720:012; 720:05I (3 hrs.); 720:061 (2 hrs.); 720:101; 720:104; 720:108; 720:124 or 720:125; 720:191 ( 2 hrs.); at least one French literature course; and electives in French more advanced than 720:002 and 720:004 to make 30 hours.

## German:

Languages: 700:190.
German: 740:011; 740:012; 740:013; 740:014; 740:101 (2-3 hrs.); 740:103 ( $2-3$ hrs.); 740:123 or 740:150; 740:191 (2 hrs.); at least one German literature course and electives in German more advanced than 740:002 and 740:004 to make 30 hours.

## Russian:

Languages: 700:190.
Russian: 770:011; 770:012; 770:013; 770:014; 770:101; 770:103; 770:191 ( 2 hrs ); at least one Russian literature course; and electives in Russian more advanced than 770:002 and 770:004 to make 30 hours.
Spanish:
Languages: 700:190.
Spanish: 780:055 (4 hrs.); 780:101; 780:104 or 780:105; 780:107 ( 2 hrs.) and 780:108; 780:120 or 780:123 or 780:127 or 780:152 (3 hrs.); 780:145 or 780:146 or 780:147; 780:191 ( 2 hrs.); and electives in Spanish more advanced than 780:002 to make 30 hours.
Note: International students must have achieved a TOEFL paper-based score of $600 /$ computer-based score of $\mathbf{2 5 0}$ or the equivalent.

## Comparative Literature Minor

This minor is designed for foreign language majors and students of English literature who demonstrate a reading knowledge of a foreign language. Other students who can demonstrate a reading knowledge of a foreign language may also enroll.

This is an interdisciplinary minor administered jointly by the Department of English Language and Literature and the Department of Modern Languages.

Required:
English Language and Literature: 620:161; a 100-level course in English literature.
.. 6 hours

18 hours
*For Foreign Language Majors-
Electives in 100 -level foreign language literature courses ( 6 hours).
English literature at the 100-level' (excluding 620:144, 620:147, 620:148) - ( 6 hours).
*For Non-Foreign Language Majors-
French: 720:104; or
German: 740:104; or
Spanish: 780:104.
Electives in 100-level foreign language literature courses ( 9 hours).

## Finance

## (College of Business Administration)

## www.cha.uni.edu/finance

R. Followill, Head, A. Cox, X. Jiang, S. Johnson, G. Mills, A. Rappaport, A. Thompson, R. Wyatt, M. Zaman.

Note: Students majoring in Finance and/or Real Estate must satisfy the College of Business Administration (CBA) admission requirements before they can officially declare their major. A copy of the Admission, Retention, and Graduation Policy may be obtained from the Advising and Student Services Office in the College of Business Administration. Prior to completion of the admission requirements, students may sign an intent to major in Finance or Real Estate and be classified as a prospective (pre)major. Pre-Finance and Pre-Real Estate majors may enroll in lower division (below 100) business courses only. Erfrollment in upper division ( 100 -level) business courses requires satisfactory completion of the CBA admission requirements and any course prerequisites.

Finance and Real Estate majors may declare a double major, and/or major and minor within the College of Business Administration, subject to the approval of the other CBA departments involved. Finance and Real Estate majors minoring within the CBA must select minors designated for business majors. Finance majors cannot minor in Financial Services, and Real Estate majors cannot minor in Real Estate. However, Finance majors may double major or minor in Real Estate, and Real Estate majors may double major in Finance or minor in Financial Services.

To graduate with a major in Finance or Real Estate from the College of Business Administration, a student must earn at least $50 \%$ of the business credit hours required for the major at UNI. Students must take at least $50 \%$ of the course work required for the degree outside the College of Business Administration. Up to nine hours of economics (excluding 920:020), and six hours of statistics may be counted as outside the College of Business Administration. A student must earn a 2.20 cumulative grade point average at UNI; and must earn an overall 2.20 grade point average in 120:xxx, 130:x0x, 150:xxx, 160:xxx, and 920:xox courses taken at UNI. Students given permission to graduate out-of-residence must earn a 2.20 or better in all courses approved and accepted for out-of-residence credit.

The Finance Department inay impose additional admission requirements for students wishing to declare a minor or a second CBA major. Eligibility to declare a minor or a second CBA major is based on competitive GPA and space availability. Students may obtain a copy of these requirements from the Advising and Student Services Office (CBB 321B) in the College of Business Administration.

## Bachelor of Arts Degree Programs

\author{

- 120 semester hours
}


## Finance Major

Required business core:
Accounting: 120:030; 120:031 ................................................. 6 hours

Management: 150:080; 150:100; 150:153; 150:154; 150:175 . 15 hours

Economics: 920:020; 920:053; 920:054; 920:070 ............... 12 hours
Required Finance: 160:150; 160:152; 160:155; 160:161 ............. 12 hours
Plus two of the following................................................................................
Finance: 160:141; 160:154; 160:156; 160:158; 160:162; 160:163.
Economics: 920:113.
*Students who major in both Finance and Real Estate may not use 160:141 to satisfy the requirements of the Finance major.
**In addition to the required 57 hours, 920:020 and 920:070 have as a prerequisite $800: 072$ or $800: 092$, either of which will satisfy Category 1C of the Liberal Arts Core.

## Real Estate Major

Required business core:
Accounting: 120:030; 120:031
6 hours

Marketing: 130:101.............................................................. 3 hours
Management: $150: 080 ; 150: 100 ; 150: 153 ; 150: 154 ; 150: 17515$ hours
Finance: 160:151 ................................................................. 3 hours
Economics: 920:020; 920:053; 920:054; 920:070 ................ 12 hours
Required Real Estate and Finance: 160:140; 160:141; 160:142;
$160: 143 ; 160: 155 ; 160: 161$
18 hours
57 hours*
${ }^{\text {* }}$ In addition to the required 57 hours, 920:020 and 920:070 have as a prerequisite $800: 072$ or $800: 092$, either of which will satisfy Category 1C of the Liberal Arts Core.

## Financial Services Minor-Business

Required:
Finance: 160:055; 160:140; 160:152; 160;162
12 hours
Electives from the following 3 hours
Accounting: 120:129.
Marketing: 130:153.
Economics: 920:113; 920:136.
$\overline{15}$ hours
Available to majors in: Accounting, Business Teaching, EconomicsBusiness Analysis Emphasis, Management, Management Information Systems, Marketing, and Real Estate.

## Financial Services Minor

Required:
Marketing: 130:101 ...0.0.......................................................... 3 hours
Management: 150:100 .......................................................... 3 hours
Finance: 160:055; 160:140; 160:162 ..................................... 2 hours
15 hours*
NOT available to majors in: Accounting, Business Teaching, Eco-nomics-Business Analysis Emphasis, Finance, Management, Management Information Systems, Marketing, and Real Estate.
*In addition to the required 15 hours, 130:101 has a prerequisite of eithes 920:024 or 920:053. 920:024 or both 920:053 and 920:054 will satisfy Cat egory 5B of the Liberal Arts Core.

## Real Estate Minor-Business

Required:
Finance: $160: 140 ; 160: 141 ; 160: 142 ; 160: 143$..................... 12 hours
Electives from the following. 3 hours
Marketing: 130:106; 130:153; 130:178.
Finance: 160:150; 160:163.
Industrial Technology: 330:018.
Economics: 920:148.
Geography: 970:104; 970:121; 970:168.
15 houre
Available to majors in: Accounting, Business Teaching, Economic Business Analysis Emphasis, Finance, Management, Management Infor mation Systems, and Marketing.

## Real Estate Minor

Required:
Finance: $160: 140 ; 160: 142 ; 160: 143$..................................... 9 hours
Marketing: 130:101 ................................................................ 3 hours
Electives from the following ......................................................... 3 hours
Marketing: 130:106; 130:153; 130:178.
Finance: 160:141**; 160:150**; 160:151**; 160:163**.
Industrial Technology: 330:018.
Economics: 920:148**.
Geography: 970:104;970:121; 970:168**.
15 hours*
NOT available to majors in: Accounting, Business Teaching, Economics Business Analysis Emphasis, Finance, Management, Management Information Systems, Marketing, and Real Estate.
*In addition to the required 15 hours, 130:101 has a prerequisite of either 920:024 or 920:053. 920:024 or both 920:053 and 920:054 will satisfy Category 5B of the Liberal Arts Core.
**These courses require additional prerequisites.

## Geography

## (College of Social and Behavioral Sciences)

## http://fp.uni.edu/geography

P. Suckling, Head. D. Dahms, T. Fogarty, J. Fryman, D. May, J. Owusu, T. Strauss, R. Sugumaran, K. Weller.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)


## Geography Major

Required:
Geography: 970:010; 970:026 (4 hr. version); 970:040; 970:061; 970:164; 970:180.

19 hours

Mathematics: 800:072
Sociology: 980:080.
Electives in geography............................................................................... hours*
40 hours
*Other programs occasionally offer courses appropriate to the geography major. The Department of Geography will approve substituting up to two such courses for electives in Geography. Note that only 3 hours of credit in 970:177 or 970:179 will count toward electives for the major.

## Geography Major With Environmental Emphasis

Required Geography core:
Geography: 970:010; 970:026 (4 hr. version); 970:028; 970:040; 970:061; 970:100; 970:164; 970:180. 25 hours
Geography: 970:163 or 970:173 or 970:175............................ 3 hours
One of the following
Mathematics: 800:072
Sociology: 980:080
Three courses from the following...o.o.o.o................................. 9 hours
Earth Science: 870:141
Geography: 970:126;970:127;970:129;970:137;
970:144.

Philosophy: 650:175.
Environmental Science: 830:165
Economics: 920:123*.
Political Science: 942:155; 943:137.
Sociology: 980:148.
43 hours
"This course requires 920:053 and 920:054 as prerequisites. Completion of both 920:053 and 920:054 will satisfy Category 5B of the Liberal Arts Core.

## Geography Major With Geographic Information Science Emphasis

Required:
Geography: 970:010; 970:026 (4 hr, version); 970:061;
970:163; 970:164; 970:165; 970:173; 970:174; 970:180.
. 28 hours
One of the following
Mathematics: 800:072
Sociology: 980:080
Two courses from the following. 6 hours
Computer Science: 810:030; 810:114*
Geography: 970:160; 970:175; 970:183
Two courses from the following. $\qquad$ 6 hours
Geography: 970:114;970:117; 970:119;970:121; 970:126;970:129;970:137;970:151;970:168
$\overline{43}$ hours
*This course requires 810:063 as prerequisite.

## Geography Major-Teaching

## (Extended Program)

The Geography Major in Teaching requires a minimum of 130-142 total hours to graduate.

Required:
Social Science: 900:190; 900:191 .......................................... 4 hours
Geography: 970:010; 970:026 (4 hr. versión); 970:040;
970:061; 970:141 or 970:142; 970:171 or 970:180 19 hours
Electives in geography. 15 hours ${ }^{*}$ 38 hours
*Other programs occasionally offer courses appropriate to the geography major. The Department of Geography will approve substituting up to two such courses for electives in geography. Note that only 3 hours of credit in 970:177 or 970:179 will count toward electives for the major.

## Geography Minor-Liberal Arts

Required:
Geography: 970:010or 970:040; 970:026 (4 hr. version)...... 7 hours
Electives in geography.
12 hours*
19 hours
*Only 3 hours of credit in 970:177 or 970:179 will count toward electives for the minor.

## Geography Minor-Teaching

Required:

> Social Science: 900:190; 900:191 0-4 hours
> Geography: 970:010 or 970:040; 970:026 (4 hr. version); 970:141 or 970:142 10 hours

Electives in geography 25-29 hours
*Only 3 hours of credit in 970:177 or 970:179 will count toward electives for the minor. Students must add 900:190 and 900:191 to the above requirements, unless already taken in the major.

## Program Certificate

For information on the following program certificate, see pages 129130 or contact the department office.

Cartography and Geographic Information Systems (GIS) Certificate

# School of Health, Physical Education, and Leisure Services 

## (College of Education)

## www.uni.edu/coe/hpels

C. Edginton, Director. I. Ahrabi-Fard, W. Bian, D. Briggs, D. Chhabra, C. Cooper, D. Cryer, T. Davis, D. Depken, R. Dieser, S. Dobie, F. Dolgener, T. Evans, K. Finn, J. Gassman, P. Geadelman, N. Goreham, J. Hall, N. Hamilton, K. Hamstra, G. Henry, L. Hensley, C. Herndon, S. Hudson, J. Hurley, S. Joslyn, K. Kerr, S. Koch, C. Kowalski, J. Lankfond, S. Lankford, R. Lee, R. Lund, G. Mack, M. Mack, D. Magnuson, R. Marston, L. Miller, Z. Ning, M. Ozmun, C. Phillips, K. Scholl, L. Shaddox, S. Stille, L. Stringer, D. Thompsom, M. Toerner, B. van der Smissen, P. Waack, J. Waldron, W. Weiss, R. Williams, J. Wilson, M. Yehieli, C. Zeman.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)
- 130 semester hours (Teaching)

A teaching minor is required in one of the social sciences.

## Division of Athletic Training

## Athletic Training Major

The School of Health, Physical Education and Leisure Services offers a major in Athletic Training. The major is designed to prepare students to become athletic training professionals. It prepares students for the National Athletic Training Board of Certification Examination as well as eligibility for an Athletic Training License in the State of lowa. The curriculum is based upon cognitive and psychomotor learning experiences. The athletic training education program is accredited by the Commission on Accreditation of Allied Health Education Programs.

## Academic Standard Policy

## Major Requirements

1. Students should indicate their interest in majoring in Athletic Training any time after their admission to UNI by completing the "Declaration of Curriculum" form, and selecting the choice "to continue as a student at UNI as a prospective major of Athletic Training." Thereafter, students will be considered "prospective majors" and will be expected to attend departmental advising sessions at regularly scheduled intervals.
2. A student's freshman year shall be devoted primarily to completing the prerequisite core in Athletic Training (42T:023 and 42T:024). Liberal Arts Core and/or electives should be taken by students to complete their schedules.
3. Students desiring to apply to the athletic training program must do the following:
a. Obtain an application packet from room 203 in the Wellness Recreation Center (WRC).
b. Submit all materials by March $1^{\text {a }}$ of each year to the Athletic Training Program office (WRC 203).
c. Students may apply while enrolled in the prerequisite courses.
4. Admission into the athletic training program is competitive, therefore the following criterion shall be used for determination of acceptance as a fully declared Athletic Training major:
a. Cumulative grade point average ( 2.50 minimum GPA accepted)
b. Prerequisite course grades
c. Application materials
d. Recommendations
e. Interview results
f. Athletic Training Observation (minimum of 50 hours of observation)
5. A committee of faculty, staff, and students will be assigned to the acceptance committee and will review the applications.
6. Notification of admittance will be made at the end of Spring semester.
7. Upon acceptance into the athletic training program, a student will be converted to a major status by the department and must do the following within 30 days of notification of acceptance:
a. Send a letter of acceptance.
b. Begin the Hepatitis B Vaccination series or sign the waiver form.
c. Provide physician certification that they are physically capable of handling the duties required of an athletic training student.
d. Complete the Athletic Training Education Program's Technical Standards Form.
e. Complete all other paper work available at the ATEP office.
8. Students not accepted into the program will be restricted from taking Athletic Training courses beyond 42T:023.
9. Transfer students entering UNI shall be subject to the admission and
acceptance requirements listed above.
10. To graduate from UNI with an Athletic Training major, student must:
a. Maintain current CPR, OSHA, and First Aid certifications.
b. Pass an annual physical.
c. Maintain a 2.50 cumulative GPA, and 3.00 GPA for Athletid Training courses.
d. Complete a minimum of 200 hours, maximum of 500 hours, of field experience each semester.
e. Be enrolled in the athletic training program for six semesters or a minimum of four semesters if transferring.
11. Please note that if a student wishes to transfer to UNI they must complete the six semesters of athletic training education and field experience. A student may transfet prior class work and field experiences but must request the petition forms from the athletic training program. (Additional transfer student policies are available at the ATEP office.)
12. Transfer students should assume that they would be in the program for three academic years unless petitioning for acceptance of prior course work and/or field experiences,
f. Follow the athletic training curricular plan as outlined in the student handbook.
g. Complete and follow the athletic training curricular plan as outlined in the student handbook.
h. Complete the Athletic Training major.
13. All other program information is available at the athletic training program office or our Web site www.uni.edu/athtrn.

Prerequisite core:
Athletic Training: 42T:023 (or the equivalent)..................... 2 hours
Required core:
Biology: 840:101; 840:102 .................................................. 8 hours
Physical Education: 420:151; 420:153; 420:154; 420:186 ( 2 hrs . Studies in Sport Nutrition) 10 hours
Health, Physical Education, and Leisure Services: 440:010 Personal Wellness of the Liberal Arts Core (This course is also part of the athletic training core to satisfy the Health content requirement within the curriculum.)

3 hours
Athletic Training: 42T:024 (or the equivalent); 42T:028;
42T:033; 42T:034; 42T:110; 42T:134; 42T:135;
42T:137; 42T:138; 42T:143; 42T:144; 42T:157;
42T:158; 42T:162; 42T:170; 42T:175; 42T:180
31 hours
54 hours

## Division of Health Promotion and Education

## Health Education Major-Teaching

Current First Aid and CPR certification is required of all major students prior to student teaching.

Required:
Educational Psychology: 200:118; 200:151.......................... 6 hours
Measurement and Research: 250:180 or
Mathematics: 800:072 3 hours
Design, Family and Consumer Sciences: 310:032; 31 F:057.. 5 hours
Psychology: 400:170 or
Social Work: 450:171 ............................................................. 3 hours
Health Promotion and Education: 410:140; 410:144;
$410: 153 ; 410: 160 ; 410: 163 ; 410: 164 ; 410: 178$ 18 hours
Physical Education: 420:050 or
Health Promotion and Education: 410:112 .......................... 3 hours
Electives to be chosen from the following list ............................ 3 hours
41 hours
Educational Psychology: 200:116.
Measurement and Research: 250:181.
Design, Family and Consumer Sciences: 31F:010; 31F:020; 31F:055; 31F:155; 31F:157; 31F:178.
Health Promotion and Education: 410:020; 410:120; 410:146;
410:147; 410:155; 410:162.
Physical Education: 420:153.
Social Work: 450:102.
Religion: 640:194 or
Philosophy: 650:194.

## Health Promotion Major

Required:
Health Promotion and Education: 410:005; 410:110;
410:112; 410:145; 410:153; 410:156; 410:163;
410:164; 410:168; 410:176
36 hours

Required courses depending on option chosen ............................ 9 hours
(Options 1-5)
Health Promotion and Education: 410:160; 410:178.
Leisure, Youth and Human Services: 430:020.
OR
(Option 6)
Health Promotion and Education: 410:118; 410:131;
410:155; 410:166
Minimum 9-11 hours from one of the following options......9-11 hours
Options 1 or 6 ( 9 hrs .)
Options 2, 3, 4 ( 10 hrs .)
Option 5 (9-11 hrs.)
54-56 hours

## Option 1 - Wellness (9 hours)

Required: 420:050; 420:153; 420:156.
Option 2 - Gerontology ( 10 hours)
Required: 410:125.
Plus 7 hours from the following courses:
Marketing: 130:178.
Design, Family and Consumer Sciences: 31F:150.
Psychology: 400:154.
Health Promotion and Education: 410:155; $410: 162$.
Physical Education: 420:142.

Religion and Philosophy: 640:194 or 650:194.
Philosophy: 650:173.
Sociology: 980:125.

## Option 3 - Women's Health (10 hours)

Required: 410:020; 410:162.
Plus 5 hours from the following courses:
Design, Family and Consumer Sciences: 31F:057; 31F:155: 31F:157; 31F:178.
Psychology: 400:060.
Health Promotion and Education: 410:128; 410:138.
Communication Studies: 48C:142; 48C:153.
Social Science: 900:020; 900:050.
History: 960:146.
Anthropology: 990:167.

## Option 4 - General (10 hours)

Accounting: 120:030.
Marketing: 130:178.
Design, Family and Consumer Sciences: 31F:020; 31F:055; 31F:057; 31F:153; 31F:155; 31F:177; 310:149.
Psychology: 400:050; 400:154; 400:158; 400:160; 400:161; 400:170;. 400:173.
Health Promotion and Education: 410:015; 410:020; 410:120; 410: 125; 410:138; 410:146; 410:155; 410:162.
Physical Education: 420:153; 420:156.
Social Work: 450:102; 450:121; 450:164; 450:171; 450:173; 450:174.
Communication Studies: 48C:138.
Religion and Philosophy: 640:194 or 650:194; 640:173 or 650:173.
Philosophy: 650:142.
Social Science: 900:050; 900:080.
Sociology: 980:060; 980:105; 980:169.
Anthropology: 990:168; 990:169.
Option 5 - Global Health/Culturally Competent Health Care

## (9-11 hours)

Required:
Health Promotion and Education: 410:138; 410:147; 410:161; 410:167; $410: 197$ (1-3 hrs.).

## Option 6 - Worksite (9 hours)

Required:
Physical Education: 420:050; 420:153; 420:156.
A student declaring a major in Health Promotion will be required to have sophomore standing and a minimum GPA of 2.50 for all courses whether taken at UNI or transferred from other institutions. A minimum 2.50 GPA will be required for admission to $410: 168$, Field Experience in Health Promotion. To graduate with a major in Health Promotion a student must have a cumulative GPA of 2.50 in all course work taken at UNI or transferred from another institution.

## Health Education Minor-Teaching

Current First Aid and CPR certification is required of all minors prior to student teaching.

## Required:

Educational Psychology: 200:118. $\qquad$ 3 hours
Design, Family and Consumer Sciences: 310:032; 31F:057 .. 5 hours
Psychology: 400:170. 3 hours
Health Promotion and Education: 410:135 (for K-6 endorsement) or $410: 140$ (for 7-12 endorsement); 410:144; 410:153; 410:160; 410:163; 410:164 ............. 15 hours 26 hours

Social Work: 450:174.

## Health Promotion Minor

Required:
Health Promotion and Education: $410: 005 ; 410: 110$; $410: 145 ; 410: 153 ; 410: 156 ; 410 ; 160 ; 410: 163 ; 410: 164 ;$ 410:176.

24 hours
24 hours

## Division of Physical Education

## Physical Education Major

Completion of this program prepares students for careers or further study in physical education or related areas but not for endorsement in K12 school settings. To declare this major a student must file an approved program of study with her/his advisor.

Required core:
Physical Education: 420:018; 420:050; 420:053; 420:056; $420: 121 ; 420: 151 ; 420: 153 ; 420: 162$........................... 21 hours
Choose one of the following emphases ...................................... 18 hours 39 hours

## Emphasis 1 - Dance Education

This emphasis provides a broad background in dance education. Students in this emphasis are strongly encouraged to take 420:034 as their Liberal Arts Core Category 3A requirement.

$$
\begin{aligned}
& \text { Physical Education: } 420: 013 ; 420: 031 ; 420: 132 ; 420: 135 \text {..... } 8 \text { hours } \\
& \text { Physical Education: } 420: 036 \text { (2 hrs.); } 420: 140(2 \text { hrs.) ....... } 4 \text { hours } \\
& \text { Physical Education: minimum of } 6 \text { hours from } 420: 191 \text {, } \\
& \qquad 420: 193,420: 194,420: 197 \text {.......................................... } 6 \text { hours } \\
&
\end{aligned}
$$

## Emphasis 2 - Exercise Science

This emphasis prepares students with a broad background in exercise science with the ability to implement individual and group exercise and fitness programs and as a preparation for graduate study in exercise science.

Physical Education: 420:025; 420:122; 420:156; 420:186 ( 5 hrs.).

12 hours
Physical Education: minimum of 6 hours from 420:191, 420:193, 420:194, 420:197. 6 hours 18 hours

## Emphasis 3 - Sport Psychology

This emphasis provides a broad education in sport psychology and is designed to prepare students interested in pursuing careers in coaching, youth sport, as a sport teaching professional, motivational trainer, or for advanced studies in coaching. Students in this emphasis are strongly encouraged to complete a coaching minor.

Physical Education: 420:019; 420:122; 420:154; 420:186
( 7 hra )
12 hours
Physical Education: minimum of 6 hours from 420:191, 420:193, 420:194, 420:197 6 hours 18 hours

## Physical Education Major-Teaching

Completion of this program qualifies the student to be recommended for endorsements for Physical Education K-6 and Physical Education 7-12.

Student teachers must have current First Aid and CPR certification.

Disciplinary Knowledge core:
Physical Education: 420:018; 420:050; 420:053; 420:056; 420:121; 420:151; 420:153; 420:162

21 hours
Pedagogical content:
Physical Education: 420:152*; 420:173; 420:174*; 420:176.. 14 houra
Skill and Activity content:
Physical Education: 420:011; 420:013; 420:015; 420:016; 420:017; 420:021

10 hour
45 houre
*Students with a major in Physical Education-Teaching will substitut 420:152 for 220:150 and 420:174 for 250:150 in the Professional Educed tion Requirements.

## Coaching Minor

Students who complete this program will qualify for the Depart ment of Education coaching endorsement. The coaching endorsement is for grades K-12. However, this program does not qualify students to teach physical education at any level.

Students who complete this program and are not teaching major will qualify for the Department of Education coaching authorization.

Required:
Educational Psychology: 200:030 3 hours
Physical Education: 420:018; 420:019; 420:024; 420:025; 420:118; 420:122; 420:127

13 hours

Physical Education: 420:101; 420:102; 420:104; 420:105; 420:107; 420:108; 420:109; 420:110; 420:111; 420:112; 420:113.

20-22 hours
Note: Students in teaching majors will complete 200:030 within the Professional Education Requirements. 420:118 (Practicum) may be completed during student teaching.

## Dance Minor

Required activities:
Physical Education: 420:A07 Beginning Ballet or 420:A52
Intermediate Ballet; 420:A13 Beginning Jazz or 420:A57 Intermediate Jazz; 420:A08 Beginning Ballroom Dance or 420:A09 Intermediate Ballroom Dance; 420:A11 Beginning Modern Dance or 420:A12 Intermediate Modern Dance; 420:A10 Beginning International Folk Dance; 420:A64 Tap Dance; 420:013 Folk, Square, Ballroom Dance; 420:013 Rhythm in Movement, Sport and Dance .aoooo. 8 hours Required theory:

Physical Education: 420:024; 420:034 6 hours
Electives in Dance: Physical Education: 420:031; 420:132; 420:135; 420:140; 420:146; 420:168
Electives
Selected to complement student's interest with the approval of the dance minor advisor from the following areas: Art, Communication Studies, Design, Family and Consumer Sciences, Health, Humanities, Instructional Technology, Music, Physical Education, Leisure, Youth and Human Services. Required courses from a student's major may not be included.

23 hours

## Physical Education MinorElementary Teaching

This Physical Education minor is designed for students who are elementary majors receiving K-6 endorsement. Students are encouraged to seek advisement from the elementary physical education staff prior to scheduling.

```
Required:
    Physical Education: 420:013; 420:016 (Soccer); 420:021*;
        420:050; 420:056; 420:140; 420:151; 420:152;
        420:153; 420:173 (2 hrs.).......eno................................ }22\mathrm{ hours
```



```
    Physical Education: 420:013;420:015; 420:016; 420:053;
        420:132; 420:140; 420:145; 420:174; 420:176.
        26 hours
```

*420:021 will substitute for $420: 045$ in the Elementary Education major requirement.

Current certification in American First Aid and CPR are required for completion of the Physical Education minor at the time of student teaching.

## Division of Leisure, Youth and Human Services

## Academic Policies

## Major Requirements

Students should indicate their interest in majoring in Leisure, Youth and Human Services by completing an application to the division. Leisure, Youth and Human Services application materials may be obtained in the division office (WRC 203). The following criteria shall be used to determine acceptance as a fully declared major in the program:

1. 2.00 or above cumulative UNI GPA.
2. $\mathbf{2 . 5 0}$ or above cumulative GPA in a minimum of 9 hours of course work in the division (must include 430:010, 430:020, and any other 430:xcx, 43T:xax or 43Y:xax course for which the student is eligible).
3. A grade of $C(2.00)$ or higher in all courses applied to the major. If the student earns less than a C in a major course, $s(\mathrm{he})$ must retake the course within two semesters in order to apply it to the major.
4. Upon satisfaction of the acceptance requirements (a-c above), the student shall be converted to major status by the division.
5. Within one semester after full admission to the major, students must demonstrate computer competency through passing the HPELS computer competency exam or successfully completing 440:0xx.
Within one semester after full admission to the major, students must file an approved undergraduate Program of Study, including all electives to be taken for the major.

In order to remain in good academic standing, students must maintain a cumulative major GPA of 2.50 or above. Students whose GPAs fall below 2.50 will have one semester in which to raise grades to the required level. If they are unable to do so, they must retake the course or courses that caused the GPA to fall below 2.50, and they will be administratively dropped from any other major courses for which they have registered.

In order to be eligible for internship and graduation, students must:

1. Meet the academic criteria above.
2. Complete a minimum of 500 Professional Experience hours in Leisure, Youth and Human Service settings.
3. Hold or obtain current certification in Community First Aid, Com-
munity CPR, Mandatory Child Abuse Reporter training, and OSHA Bloodborne Pathogens Universal Precautions Training.

## Minor Requirements

Admission to the Leisure, Youth and Human Services and Youth Services Administration minors requires students to have a cumulative UNI GPA of 2.00. To graduate with a minor in Leisure, Youth and Human Services or Youth Services Administration, students must have a minor GPA of 2.50 , with a grade of $C(2.00)$ or higher in all courses applied to the minor. Students must officially declare the minor and file an undergraduate minor Program of Study within one semester of declaration to be eligible to register for classes.

## Leisure, Youth and Human Services Major

The Leisure, Youth and Human Services major prepares students for work and on-going study in the leisure, youth and human services field. Graduates may find employment in working with people of all ages with diverse backgrounds in areas such as municipal parks and recreation, commercial recreation, tourism, outdoor recreation, therapeutic recreation (clinical and community-based settings), the nonprofit sector, youth serving agencies, military recreation, and other opportunities. The major focuses on direct service programming with an emphasis on supervisory and managerial skills. The Leisure, Youth and Human Services program is accredited by NRPA/AALR.

The Leisure, Youth and Human Services major is offered with six focus areas: Nonprofit Youth Services Administration; Outdoor Recreation; Programming Services Administration; Therapeutic Recreation; Tourism; and Youth Services. There is a common core of courses for all focus areas, with additional course requirements in each focus area.

Required core:
Leisure, Youth and Human Services: 430:010; 430:020; 430:110; 430:114; 430:121; 430:169; 430:184; 430:187; 430:189............................................................... .... 35 hours Focus area: choose one of the following .................................27-33 hours

62-68 hours

## Focus Area - Nonprofit Youth Administration

The Nonprofit Youth Administration option requires a minimum of 122 total hours to graduate.
Required:
Leisure, Youth and Human Services: 43Y:060; 43Y:150;
43Y:151; 43Y:154; 43Y:155 ..... 15 hours
Supporting courses:
12 hours as approved by advisor. ..... 12 hours
27 hours
Focus Area - Outdoor Recreation
The Outdoor Recreation option requires a minimum of 122 total hours to graduate.
Required:
Leisure, Youth and Human Services: 430:030; 430:050; 430:130; 430:143; 430:146 ..... 15 hours
Supporting courses:
12 hours as approved by advisor....................................... 12 hours

## Focus Area - Programming Services Administration

The Programming Services Administration option requires a minimum of 122 total hours to graduate.

## Required:

Leisure, Youth and Human Services: 430:030; 430:168;
430:172; 43Y:155
12 hours
Supporting courses:
15 hours as approved by advisor....................................... 15 hours

## Focus Area - Therapeutic Recreation (Extended Program)

The Therapeutic Recreation option may require a minimum of 127 hours to graduate.

Required:
Leisure, Youth and Human Services: 430:030; 430:123; 430:160; 430:163; 430:167 15 hours
Supporting courses:
18 hours to be developed in consultation with advisor. The
following are required for National Council for Therapeutic Recreation Certification (NCTRC): Physical Education: 420:050. 3 hours
Design, Family and Conşumer Sciences: 31F:055................ 3 hours
Psychology: 400:142. 3 hours
Electives: 9 hours in human services content areas including adapted physical education, related biological/physical sciences, human services, psychology, sociology, and special education $\qquad$ .9 hours
33 hours
Note: $400: 001$ may be used to satisfy Category 5A and 980:001 may be used to satisfy Category 5A/5C of the Liberal Arts Core.

## Focus Area - Tourism

The Tourism option requires a minimum of 122 total hours to graduate.

## Required:

Leisure, Youth and Human Services: 43T:070; 43T:075; 430:168

9 hours
One course from: 43T:170; 43T:171 .................................... 3 hours
One course from: 430:172; 43T:173........................................ 3 hours
Supporting courses:
12 hours as approved by advisor.
12 hours
27 hours

## Focus Area - Youth Services

The Youth Services option requires a minimum of 122 total hours to graduate.

## Required:

Leisure, Youth and Human Services: 430:030; 43Y:060; 43Y:155; 43Y-157 12 hours
Supporting courses:
15 hours as approved by advisor.
15 hours
27 hours
Leisure, Youth and Human Services Minor
Required:
Leisure, Youth and Human Services: 430:010; 430:020; 430:030; 430:110 12 hours
Electives (two of the following). 6 hours
Leisure, Youth and Human Services: 430:114; 430:121; $430: 123 ; 430: 168 ; 430: 169 ; 430: 172$.

## Youth Services Administration Minor

Required:
Youth and Human Service Administration: 43Y:060; 43Y:150; 43Y:151; 43Y:154; 43Y:155

15 hourt
Leisure, Youth and Human Services: 430:188 ..................... 2 hour
17 houril

## Program Certificates

For information on the following program certificates, see page 130 or contact the Leisure, Youth and Human Services Division or Healt Promotion and Education Division within the School of Health, Physic ll Education, and Leisure Services.

## Environmental Health Certificate Certificate in Glohal Health/Culturally Competent Health Care Outdoor Recreation Certificate <br> School-Age Care Leadership Certificate <br> Tourism Certificate <br> Youth Agency Administration Certificate

The Youth Development in Religious Settings Certificate interdisd plinary program is jointly offered by the Division of Leisure, Youth and Human Services within the School of Health, Physical Education and Leisure Services and the Department of Philosophy and Religion. For information on the following program certificate, see page 131 or intertin ested students should contact the Division of Leisure, Youth and Huma Services or the Department of Philosophy and Religion.

## Youth Development in Religious Settings Certificate

## History

## (College of Social and Behavioral Sciences)

## http://fp.uni.edu/history

R. Martin, Head. J. Baskerville, G. Bruess, T. Connors, B. Cutter, R. Dise T. Eden, L. Fenech, J. Goldman, R. Hesselink, W. Hettle, C. Holcombe, J. Johnson, S. Kimble, J. Lees, D. Maier, J. McGlade, T. O'Connor, B. Robert' K. Sadkowski, R. Sandstrom. D. Shepardson, D. Walker, C. Weisenbergen C. Wells.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)
- 130 semester hours (Teaching)


## European Studies Major

This is an interdisciplinary program offered jointly by the College of Social and Behavioral Sciences and the College of Humanities and Fine Arts, and is under the jurisdiction of the heads of the Departments of History and Modern Languages, and can only be elected as a second major with a major in history or a major in a foreign language (French, German, Portuguese, Russian, and Spanish) or Russian and East European Studies.


46 hours
*With permission, students emphasizing the British Isles may substitute Gaelic, Old or Middle English for this requirement.

## History Major-Liberal Arts

Required:
Humanities: those 3 hours of Humanities (either 680:021, 680:022, or 680:023) not used to fulfill the 6 -hour Liberal Arts Core curriculum requirement in Category 2A.*

3 hours
History: 960:010 (this course must be taken immediately after major is declared); 960:014; 960:015 (960:014 and 960:015 must be taken by the end of the sophomore year); 960:192. 12 hours
Electives in history ............................................................................... 24 hours
To include:
European history - 12 hours
Must include one course from Category A (960:101, 960:103, 960:123, $960: 151,960: 152,960: 153,960: 158$, 960:164, $960: 171,960: 173$ ) and one course from Category B (960:126, 960:154, 960:155, $960: 156$, $960: 157,960: 160,960: 161,960: 162,960: 165,960: 169$, $960: 170,960: 172,960: 174,960: 188)$.
Non-Western history - 6 hours
960:127, $960: 128,960: 175,960: 176,960: 177,960: 178$, 960:180, 960:181, 960:182, 960:183, 960:187.
Electives from two related fields approved by the Department of History (courses must be $\mathbf{1 0 0}$-level) 6 hours 45 hours
*All History majors must successfully complete Category 2A of the Liberal Arts Core.

## History Major-Teaching

Required:
Social Science: 900:190; 900:191 .......................................... 4 hours
Humanities: those 3 hours of Humanities (either 680:021, 680:022, or 680:023) not used to fulfill the 6 -hour Liberal Arts Core curriculum requirement in Category 2A.* 3 hours
History: 960:010 (this course must be taken immediately. after major is declared); 960:014; 960:015 (960:014 and $960: 015$ must be taken by the end of the sophomore year); $960: 192$ 12 hours
Electives in history ............................................................................... 24 hours
To include:
European history - 9 hours
Must include one course from Category A (960:101, 960:103, 960:123, $960: 151,960: 152,960: 153$, $960: 158,960: 164,960: 171,960: 173)$ and one course from Category B ( $960: 126,960: 154$, 960:155, $960: 156,960: 157,960: 160,960: 161$, 960:162, $960: 165,960: 169,960: 170,960: 172$, 960:174, 960:188).
Non-Western history - 6 hours 960:127,960:128, $960: 175,960: 176,960: 177$, $960: 178,960: 180,960: 181,960: 182,960: 183$, 960:187.
United States history - 9 hours
43 hours
The History major may consider a minor in at least one other social science discipline.
*All History majors must successfully complete Category 2A of the Liberal Arts Core.
History MinorElectives in history18 hours
Note: $960: 015$ and one European history course from Category B (960:126,$960: 154,960: 155,960: 156,960: 157,960: 160,960: 161,960: 162,960: 165$,960:169, $960: 170,960: 172,960: 174,960: 188$ ) are strongly recommended.

## History Minor-Teaching

Required:
Social Science: 900:190; 900:191 (corequisites) (unless already taken for the major) .....cocononocoo.o.................
History: 960:014 and 960:015 for teaching endorsement in American history; or two courses in European History - one from Category A (960:101, 960:103, $960: 123,960: 151,960: 152,960: 153,960: 158$, $960: 164,960: 171,960: 173$ ) and one from Category B (960:126, 960:154, 960:155, 960:156, 960:157, $960: 160,960: 161,960: 162,960: 165,960: 169,960: 170$, 960:172, $960: 174,960: 188$ ) for teaching endorsement in world history $\qquad$ 6 hours
Electives in history: (for teaching endorsement in American history, students must take an additional 18 hours in United States history; for teaching endorsement in world history, students must take an additional 18 hours in European and non-Western history) $\qquad$ 18 hours 24-28 hours
Students whose emphasis is world history must include one nonWestern history course and one history course from the following: Middle Ages, Ancient Near East, Greece, or Rome.

## History Minor (K-6)-Teaching

Required:
Elementary, Early Childhood, and Middle Level Education: 210:143 3 hours
History: 960:014;960:015;960:130;9 hours of world history including 3 hours of European history and 3 hours of non-Western history 18 hours
Electives in history ...................................................................... $\frac{3}{2}$ hours
24 hours

## Program Certificate

For information on the following program certificate, see page 131 or contact the department office.

## Certificate in Public History

## Industrial Technology

(College of Natural Sciences)

## www.uni.edu/indtech

M. Fahmy, Head. J. Ahmad, L. Burgess, S. Egger, J. Fecik, S. Giese, T. Hall, D. Hotek, C. Johnsom, A. Kashef, Y. Lerner, R. O'Meara, R. Pecem, N. Pramanik, P. Rao, M. Salim, S. Varzavand, M. White.

## Bachelor of Science Degree Program

## Construction Management Major

The Construction Management major requires a minimum of 126 total hours to graduate.

Required core:
Construction sciences/construction: 330:018; 330:025; $330: 027 ; 330: 033 ; 330: 045 ; 330: 100 ; 330: 124 ; 330: 125 ;$
$330: 128 ; 330: 149 ; 330: 153 ; 330: 154 ; 330: 170 ;$
$330: 173 ; 330: 175 ; 330: 185 ; 330: 196 \ldots . . . . . . . . . . . . . . . . . . . . . . ~$
51 hours
Required:
Business and management: Accounting: 120:030.....aco.............o................................ 3 hours
Management: 150:080; 150:101; 150:145 ..................... 9 hours
Economics: 920:020*; 920:024 ........................................... 6 hours
Mathematics and science: Mathematics: 800:060; 800:072..................................... 7 hours

Physics: 880:054........................................................... 4 hours
84 hours
*800:072 or 800:092 is a prerequisite for 920:020. Either 800:072 or 800:092 may be used to satisfy Category 1C of the Liberal Arts Core.

## Electrical and Information Engineering Technology (EIET) Major

The Electrical and Information Engineering Technology (EIET) major provides theoretical and hands-on experience in the field of electrical analog/digital electronics, microcomputer, electronics communication systems, networking and their industrial applications.

The Electrical and Information Engineering Technology (EIET) major requires a minimum of 127 hours to graduate.

Required mathematics and computer science core:
Mathematics: 800:060, 800:061; 800:072 ............................ 11 hours

Physics: 880:130; 880:131 ..................................................... 8 hours
Required technical core:
Industrial Technology: 330:037; 330:038; 330:039; 330:041;
330:042; 330:103; 330:104; 330:129; 330:152; 330:156;
330:157; 330:160; 330:164; 330:166; 330:167; 330:174;
330:176
49 hours

74 hours

## Manufacturing Technology Major

The Manufacturing Technology major requires a minimum of 128 hours to graduate.

## Required mathematics and science core:

 Mathematics: 800:046 or 800:048 or 800:060; 800:072 ......... 7 hoursChemistry: 860:020 or 860:044 ............................................. 4 hours
Physics: 880:054 or 880:130.................................................. 4 hours
Required technical core:
Industrial Technology: 330:008; 330:009; 330:017; 330:024
( 3 hrs.); 330:060; 330:112; 330:132; 330:142; 330:143;
330:170; 330:172; 330:179 ( 1 hr.$) ; 330: 187 ; 330: 196 ;$ 330:197

38 hours
Concentration: choose one of the following three concentrations ................................................................................ 22 hours 75 hours

Automation and Production: 330:014; 330:113; 330:145; 330:146; 330:147; 330:177; 4 hours electives (see below).
Manufacturing Design: 330:106; 330:113; 330:122; 330:135; 330:148; 330:155; 5 hours electives (see below).
Metal Casting: 330:040; 330:134; 330:136; 330:137; 330:141; 330:192; 5 hours electives (see below).
Select elective hours from the following: Industrial Technology: any 100-level course. Management: 150:113; 150:119. Communication: 48C:141; 48C:173. English, Language and Literature: 620:105. Philosophy: 650:142. Sociology: 980:102.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)
- 130 semester hours (Teaching)


## Graphic Communications Major

Required:
$\qquad$
Industrial Technology: 330:022; 330:055; 330:065; 330:070; 330:144; 330:150; 330:158; 330:161; 330:179 ( 3 hrs.); 330:187; 330:194; 330:196. .38-39 hours Mathematics: 800:046 or 800:072 ....................................... 3-4 hours Chemistry: 860:010 or 860:020 or 860:044 ........................ $3-4$ hours Physics: 880:011 or 880:012 or 880:054............................. 3-4 hours Electives:

Industrial Technology: 330:020 or 330:143.
Two of the following. 6 hours Industrial Technology: 330:163; 330:169. Art: 600:125*; 600:127.

59-63 hours
*600:125 has prerequisite of 600:025.

## Technology Education and Training Major-Teaching Option

This major option requires a minimum of 130 total hours to graduate.
Required:
Science core:
Physics: 880:011 or 880:012 or 880:054 3-4 hours
Technology core:
Industrial Technology: 330:008; 330:009; 330:017; 330:018; 330:022; 330:024 (3 hrs.); 330:036; 330:114 or 330:121 23 hours
Education and training core:
Industrial Technology: 330:019; 330:120; 330:178; 330:190; 330:195. 15 hours Electives in industrial technology: (choose from construction, energy and power, or transportation. $\qquad$ 6 hours 47-48 hours
Note: Technology Education and Training Major-Teaching Option will be waived from 240:020 of the Professional Education Requirements. A student changing majors to a different teaching major would be required to complete 240:020.

## Technology Education and Training Major-Training Option

This major option requires a minimum of 120 total hours to graduate.
Required:
Science core:
Physics: 880:011 or 880:012 or 880:054 ...................... 3-4 hours
Technology core:
Industrial Technology: 330:008; 330:009; 330:017; 330:018; 330:022; 330:024 ( 3 hrs.); 330:036; 330:114 or 330:121 23 hours

## Education and training core:

Industrial Technology: 330:019; 330:120; 330:178; 330:190; 330:195

15 hours

## Technology training:

Measurement and Research: 250:150 .................................. 2 hours
Industrial Technology: 330:020; 330:143 or
150:153; 330:168; 330:187................................... 12 hours
Mathematics: 800:072......................................................... 3 hours
Electives in industrial technology ...................................................... 3 hours
61-62 hours

## Technology Management Major

Required:
Industrial Technology: 330:008; 330:009; 330:018; 330:020; 330:022; 330:036; 330:065; 330:142; 330:143 or 150:153; 330:172; 330:187; 330:196 .... 35-36 hours
Mathematics: 800:072.......................................................... 3 hours
Chemistry: 860:010 or 860:020 or 860:044 ........................ 3-4 hours
Physics: 880:011 or 880:012 or 880:054............................. 3-4 hours
Electives in industrial technology ......................................... 18 hours
62-65 hours

## Electrical and Electronics Technology Minor (EET)

Required:
Industrial Technology: 330:037; 330:038; 330:041; 330:042; 330:129; 330:164......................................................... 18 hours
Mathematics: 800:060......................................................... 4 hours
Computer Science: 810:030 or 810:035 or 810:036.............. 3 hours
Physics: 880:054 or 880:130.................................................... 4 hours
29 hours

## Graphic Communications Minor

Required:
Industrial Technology: 330:022; 330:055; 330:070; 330:161; 330:196

17 hours
Electives: two courses from the following:
Industrial Technology: 330:144; 330:150; 330:158; 330:163; 330:169; 330:194

6 hours
23 hours

# Technology Education and Training Minor-Teaching 

Required:<br>Industrial Technology: 330:008; 330:009; 330:017; 330:018; 330:019; 330:022; 330:036; 330:178; 330:190; 330:195.. 29 hours<br>Electives in industrial technology: (choose from construction,<br>energy and power, or transportation)<br>. 3 hours<br>32 hours

## Technology Management Minor

Required:
Industrial Technology: 330:008; 330:009; 330:022; 330:036; 330:196

14 hours
Electives in industrial technology ........................................... 10 hours
24 hours

## Combined B.A./M.A. or B.S./M.A. Program

The Department of Industrial Technology offers a combined program leading to the Baccalaureate Degree and Master of Arts Degree in Technology. Students interested in the program should declare their intent by the end of the junior year (or have completed at least 90 semester hours) and enter the program during their senior year provided that $s($ he) has earned at least 90 hours with an overall GPA of 3.00 or more. Please refer to the graduate section of this catalog (page 160) for detailed information on enrollment procedures and graduate program requirements.

## Program Certificate

For information on the following program certificate, see page 131 or contact the department office.

## Technology Management Certificate

## Interdisciplinary Majors and Minors

The university offers a variety of interdisciplinary curricula to meet the growing need and interest in work beyond collegiate division. The following programs are under the supervision and jurisdiction of several committees, departments, or colleges as indicated. The programs include:

American Ethnic Studies Minor
American Studies Major
Asian Studies Major
Asian Studies Minor
Environmental Studies Minor
General Studies Major
Humanities Major
Humanities Minor
Individual Studies Major
Inter-American Studies Major
Inter-American Studies Minor
Leadership Studies Minor
Russian and East European Studies Major
Russian and East European Studies Minor
Women's Studies Minor

# Bachelor of Arts Degree Programs 

- 120 semester hours


## American Ethnic Studies Minor

This interdisciplinary minor is offered under the jurisdiction and general supervision of the Deans of the College of Social and Behavior Sciences and Humanities and Fine Arts.

## Required:

Social Work or Sociology: 450:045 or 900:045 or 980:045 ... 3 hours
Social Science: 900:145 (this Capstone course to be taken last)

3 hours

Electives from the following list of courses, chosen in
consultation with the Director of the American Ethnic
Studies Program for a minimum of
15 hours
21 hours
List of electives:
Area 1 - American Historical Foundations
One of the following courses:
History: 960:122.
Anthropology: 990:132.
Area 2 - Ethnographic Background Perspectives
One of the following courses:
Social Work: 450:142.
Humanities: 680:130; 680:160.
Area 3 - Arts and Humanities
One of the following courses:
Music: 520:030.
Music History and Musicology: 590:160.
English Language and Literature: 620:055.
Area 4 - Politics and Society
One of the following courses:
Social Work: 450:163*.
Humanities: 680:131*.
*Additional prerequisites are required.
In courses with multiple sections, the section which indicates an American Ethnic Studies emphasis will count for the minor.

These electives may also include individual department's reading topics, and experimental courses, and other courses, as well as coursea sponsored by the Individual Studies Program that directly relate to American Ethnic Studies. The electives selected must have the written approval of the director to be filed in the Office of the Registrar before the final completion and approval of the minor.

## American Studies Major

This is an interdisciplinary program offered jointly by the College of Social and Behavioral Sciences and the College of Humanities and Fine Arts, and is under the jurisdiction of the heads of the departments of Hisy tory and English Language and Literature and the general supervision of the Committee on American Studies.

The American Studies major consists of a minimum of 9 semeste4 hours in each of the following four areas:

1) American history
2) American literature
3) Economics, geography, political science, sociology and anthropol ogy
4) Religion, philosophy, theatre, art, and music

## Required:

American literature elective ................................................. 3 hours
Political Science: 942:014..................................................... 3 hours
History: 960:014; 960:015;960:144...................................... 9 hours
Electives: from the four areas above........................................... 21 hours
Required: a senior colloquium* ................................................ 3 hours
39 hours
*Colloquium to be an exploration of the total culture of an era or region in historical perspective by applying the disciplines of history, literature, art, philosophy, and the social sciences.

The courses from the four specified areas must be chosen in consultation with an advisor from the Committee on American Studies.

Courses used to meet Liberal Arts Core requirements may not be counted on this major.

## Asian Studies Major

Required:
Humanities: two of the following - 680:122; 680:124; 680:125....................................................................... 6 hours 680:198 (Independent Study/Supervised Research Project to be supervised by Asian Studies Committee).. 3 hours
Anthropology: 990:011 ........................................................ 3 hours
Electives: a minimum of 24 hours of credit from at least three different disciplines must be completed from the following courses (a maximum of 6 semester hours credit in language courses may be applied toward satisfying the 24-hour elective credit requirement).................................. 24 hours

Art: 600:141 (sections on India, Japan, or China); 600:147.
Religion: 640:130; 640:132.
Humanities: one of the following - 680:122; 680:124; 680:125.
Languages:
Chinese: 710:001; 710:002; 710:011; 710:102. Japanese: 730:001; 730:002; 730:011; 730:012.
Economics: 920:136*; 920:143*.
Political Science: 944:162.
History: 960:127; 960:128;960:181; 960:182; 960:183; 960:187.
Geography: 970:141.
Anthropology: 990:143.
36 hours
*920:053 and 920:054 are required as prerequisites for all 100-level economics courses. Both 920:053 and 920:054 will substitute for 920:024 which will satisfy Category 5B of the Liberal Arts Core.

Students are encouraged to study abroad for a minimum of one semester.

## Asian Studies Minor

The programs and general courses in the non-Western foreign area studies are offered under the jurisdiction of the Committee on Asian Studies and the general supervision of the Dean of the College of Social and Behavioral Sciences.

[^7]
## Environmental Studies Minor

This is an interdisciplinary minor offered under the jurisdiction of the Environmental Programs Office and the general supervision of the Dean of the College of Natural Sciences.

## Required:

Environmental Science: 830:130........................................... 3 hours
or
Biology: 840:051 ................................................................. 4 hours
Economics: 920:053; 920:054; 920:123* .............................. 9 hours
Geography: 970:100** ......................................................... 3 hours
Sociology: 980:148** .......................................................... 3 hours
Electives: a minimum of 9 semester hours of credit (of which at least 6 hours must be from 100 -level courses) from disciplines other than the major and with no more than 6 hours from any single department must be completed from courses approved by the Environmental Programs Office $\qquad$ 9 hours 27-28 hours
*Taking prerequisite courses 920:053 and 920:054 will satisfy Category 5B of the Liberal Arts Core.
**These courses have prerequisites which may satisfy requirements in the Liberal Arts Core.

This minor allows students a specific program to complement their major. Because the Environmental Studies minor is designed to broaden students' awareness of environmental issues as they relate to their major discipline, students interested in this minor should have a clear grasp of the major field before applying for such a mipor.

Applications and approval of particular programs will be administered under the College of Natural Sciences, with the interdisciplinary Environmental Programs Office serving as the program coordinating body. Upon application by the student, the Dean of the College of Natural Sciences will appoint a faculty advisor to work closely with the student in planning her/his minor.

## General Studies Major

This is a diversified liberal arts major supervised by the Coordinator of the Individual Studies Program. The major requires the completion of 120 semester hours, including the Liberal Arts Core requirement of 45 semester hours.

## Required:

a minimum of 15 semester hours of 100 -level courses from each
of three of the five colleges* for a minimum total of. 45 hours

A General Studies major enables students to take a wide variety of courses from many different departments. This can lead to a well-rounded liberal arts education. The major is not directed toward any particular vocation or certification. The emphasis of this major is on distribution rather than concentration. Each General Studies major is encouraged to develop a program of study according to her/his own needs, interests, and career goals. The selection of courses is largely left to the student. Students may not declare a second major and be registered for the General Studies major.
*The five colleges are: 1) College of Business Administration; 2) College of Education; 3) College of Humanities and Fine Arts; 4) College of Natural Sciences; and 5) College of Social and Behavioral Sciences. See pages 5 to 8 for a list of the departments under each college.
(See pages 42-43 for the General Studies program for registered nurses.)

## Humanities Major

This is an interdisciplinary major offered by the College of Humanities and Fine Arts, and is under the jurisdiction of the dean of that college.

## Required:

Humanities: 680:021; 680:022; 680:023; 680:192..........o.ono.o. 12 hours
Interdisciplinary courses in, or including, the humanities* 9 hours
Courses in history, from any department.............................. 6 hours
Critical and analytical course..................oocoo.o.o...o................. 3 hours
Participatory course in creative or performing arts............. 3 hours
Electives in any of the above or other humanities areas .............. 2 hours 42 hours
*These courses may include seminars in the interpretation of texts, in philosophy of history, in aesthetics, in a theme or period, in a topic relating the humanities to the natural or social sciences, or other appropriate courses as available.

The student, with the consent of the Humanities Advisor, will outline a cohesive program of cross-disciplinary study around a chronological period, theme, culture, or other focus of the student's choice.

All reasonable variations on this program should be approved.

## Humanities Minor

This is an interdisciplinary minor offered by the College of Humanities and Fine Arts, and is under the jurisdiction of the dean of that college.

Required: a minimum of 21 hours with at least one course* to be chosen from each of the following areas:
Humanities: 680:021; 680:022; 680:168.

## English:

English Language and Literature: 620:034.
Arts (participatory):
Communication: 48C:011.
Applied Music: 540:Nxx (instrument or voice).
Art: 600:002 or 600:004.
English Language and Literature: 620:070.
Philosophy and Religion: 640:024; any one of 650:100, 650:101, 650:103 or 650:104.

## Social Science:

Psychology: 400:118.
Sociology: 980:060.
Anthropology: 990:011.
Interdisciplinary Studies: Individual Studies; 000:196** (Interdisciplinary Readings). Humanities: 680:192.

Science and Social Science majors may be excused from the requirement in their areas, and may substitute a course in any of the other specified areas or in history.
*If any of these courses are taken by the student to meet the requirements of any other program (e.go, liberal arts core, major field, etc.), the student must elect another course in any of the above specified areas or in history, except that either 680:021 or 680:022 may be counted for the liberal arts core.
**This course should be elected only if 680:192 is not relevant to the emphasis of the minor. Readings proposed by the student should act to integrate the work done in the minor.

## Individual Studies Major

Under the direction of the Individual Studies Program Coordinatu this major requires the completion of 120 semester hours, including the Liberal Arts Core requirement of 45 semester hours.

## Required:


(Plus 25-39 hours of university electives or other major or minor credit?
If it is found the university does not offer the major desired, it may be possible, through the Individual Studies Program, for a student to create her/his own program of study. The purpose of the Individual Stuch ies major is twofold: 1) to enable a student to design an individualizal major by selecting courses from several academic departments, and 2) to explore interdisciplinary areas of study before those areas are formall adopted as departmental or interdepartmental majors.

Students interested in this major should have at least one semestert experience in university study before applying. A student shall consul first with the Individual Studies Coordinator concerning the feasibility of designing an Individual Studies major in a particular area. If the unive, sity does not have faculty or curricular resources for the area requestol the student will be so advised. Also, if the student does not appear to be academically prepared, or if her/his plans are not sufficiently clear, specific steps to correct these problems will be recommended.

Once an advisor is appointed, the student and the advisor will develop a list of courses to comprise the proposed major, and an interdid ciplinary faculty committee will be selected to take action on the specifiprogram. In some cases, with the approval of the faculty advisor and the program coordinator, an extraordinary amount of independent stud may be counted toward the major. In most cases, an undergraduate thesir will be required of this major.

## Inter-American Studies Major

This major is offered jointly by the College of Social and Behaviorel Sciences and the College of Humanities and Fine Arts, and is adminial tered by the university's Inter-American Studies Committee. For more information contact Dr. Philip Mauceri, advisor, Inter-American Stud4 ies Committee, Sabin 319, University of Northern Iowa, Cedar Falls, IA 50614-0404; phone 319-273-2528.

Students are also encouraged to study abroad for a minimum of one semester.

Language 7-12 hours
English (a program of study will be determined by the student and her/his advisor.)
or
Portuguese: 790:001 or 790:140; 790:060 (2-4 hrs.); 790:101 ( 3 hrs .) or
French: 720:051; 720:061 or
Spanish: 780:055.
Common core 24 hours
Humanities: 680:123 or 780:120;
Humanities, Interdepartmental: 690:030;
Science and Science Education: 820:150;
Social Science: 900:023; 900:135;
Political Science: 944:167;
History: 960:176 or 960:180 or 960:1xx (equivalent course);
Anthropology: 990:132 or 990:137.
Electives
9-12 hours
A total of 9-12 hours, to be selected entirely from within one of the following five emphases.

40-48 hours

## Emphasis 1. Business and Economics

Accounting: 120:030.
Marketing/Management: 130:101 or 150:153.
Economics/Management: 920:053; 920:137 or 150:189.
Note: Students electing this emphasis may also wish to consider obtaining the Certificate in International Business; consult with the Inter-American Studies advisor.
Emphasis 2. Cross-Cultural Studies in Education/Global Health
Educational Psychology: 200:186 or 200:188.
Leisure, Youth and Human Services: 430:030.
Communication: 48C:151.
TESOL/Applied Linguistics: 630:196.
Note: Students may also complete Emphasis 2 by satisfying the requirements for the Global Health Certificate. The chosen electives must be $430: 030$ and 48 C : 151 .
Emphasis 3. Environmental Awareness
Biology: 840:051.
Earth Science: 870:031.
Biology/Earth Science: 840:168* or 870:171.
Environmental Science/Biology/Earth Science: 830:195 (1-3 hrs.) or 840:195 (1-3 hrs.) or 870:195 (1-3 hrs.).
Geography/Philosophy: 970:100 or 650:175.
*840:168 requires 840:051, 840:052, 860:044 and 860:048 or 860:070 as prerequisites.

## Emphasis 4. Humanities and Fine Arts

Communications/Music History and Musicology/Performance
Literature and Repertory: 48C:108 or 48C:110 or 590:160 or 595:129;
English Language and Literature/French/Spanish/Portuguese: 620:055 or 620:157 or $620: 158$ or equivalent; or $720: 101$ or 780:101 or 790:101.
Religion: 640:117 or 640:161/990:161.
Humanities: 680:130.

## Emphasis 5. Social Sciences

Political Science: 943:024 or 943:125 or 943:145; 943:126.
History: $960: 176$ or $960: 180$ or $960: 177$ (or equivalent course);
Geography: 970:104 or 970:151.
Anthropology: 990:141 or 990:142.

## Inter-American Studies Minor

This minor is offered jointly by the College of Social and Behavioral Sciences and the College of Humanities and Fine Arts, and is administered by the university's Inter-American Studies Committee. For more information contact Dr. Philip Mauceri, advisor, Inter-American Studies Committee, Sabin 319, University of Northern Iowa, Cedar Falls, IA 50614-0404; phone 319-273-2528.

Required:

> Language .......................................................................... 7-10 hours

English: three courses, to be determined by the student and her/his advisor; or
French: 720:011 or
Spanish: 780:101 or
Portuguese: 790:020.
Common core: five of the following courses.ono................. 15 hours
English Language and Literature/French/Spanish/ Portuguese: 620:157 or 620:158 or 720:101 or 780:101 or 790:101.
Humanities: 680:123 or 780:120.
Humanities, Interdepartmental: 690:030.
Science and Science Education: 820:150.
Social Science: 900:023 or 900:135.
Political Science: 944:167.
History: 960:176 or 960:180 or 960:1xx (equivalent course).
Geography: 970:104 or 970:151.
Anthropology: 990:132 or 990:137.
One of the following courses $\qquad$ 3 hours
Educational Psychology: 200:188.
Religion: 640:175.
Philosophy: 650:175.
Economics: 920:024
25-28 hours

## Leadership Studies Minor

The Leadership Studies minor is an interdisciplinary program that educates students about and for leadership in a democratic society. The minor provides an overview of diverse leadership theories, concepts, and issues; assessment of leadership styles and abilities; and practical experiences tailored to the students' abilities. It is open to any student; prior experience in leadership activities is not required.

Admission requires a cumulative GPA of 2.50 (or permission of director) and completion of one semester of college work (UNI or transfer).

Students who are pursuing the Leadership Studies minor or the Certificate in Leadership Foundations must have an overall GPA in the core courses, including the internship, of 2.50 with no lower than a C in any one course.

Required:
Leadership core courses: 680:010; 680:110; 680:188 .............. 7 hours
Leadership internship: 680:169...........................................2-3 hours
Electives 8-9 hours
A. Diversity - one course from approved list of courses on diversity.
Psychology: 400:060.
Social Work: 450:045.
Communication: 48C:151; 48C:153.
Humanities: 680:130; 680:156.
Social Science: 900:020.
B. Ethics - one course from approved list of courses on ethics.

Communication: 48C:128.
Religion: 640:171.
Philosophy: 650:142; 650:172; 650:173; 650:174; 650:175.
C. General Elective - one course from approved list.

Management: 150:100; 150:153.
Social Work: 450:102.
Communication: 48C:071; 48C:121; 48C:141; 48C:144; 48C:151; 48C:153; 48C:173.
English Language and Literature: 620:104.
Humanities: 680:130.
Political Science: 940:189; 941:156; 942:150; 942:151.
History: 960:144; 960:150.
Sociology: 980:176.
Note: $48 \mathrm{C}: 151,48 \mathrm{C}: 153$, and $680: 130$ may count as either diversity elective or general elective for the minor.

Students may petition Director for Leadership Studies for a course not on the elective lists.

$$
\overline{17-19} \text { hours }
$$

## Program Certificate

For information on the following program certificate, see page 134 or contact the Dean of the College of Humanities and Fine Arts.

## Certificate in Leadership Foundations

## Russian and East European Studies Major

This major is offered by the College of Humanities and Fine Arts and the College of Social and Behavioral Sciences.
Required:
Language:
Russian: 770:001; 770:002; 770:003; 770:004; 770:011;
770:012; 770:013; 770:014; 770:101.................. 23 hours
One culture course:
Russian: 680:121; 770:141; 770:142 .............................. 3 hours
One of the following literature courses:
Russian: 770:031; 770:102; 770:104; 770:132; 770:134.. 3 hours
Political Science: 944:164.................................................. 3 hours
Two of the following:
History: $960: 169 ; 960: 170 ; 960: 173 ; 960: 188$................ 6 hours
Additional 9 hours of courses that may include: ................ 9 hours
Philosophy: $650: 105$.
Political Science: $944: 123$.
Geography: $970: 141$.
Or an additional history course from above or
modern language course with permission of
major advisor.

Students are encouraged to study abroad for one semester.

## Russian and East European Studies Minor

This minor is offered by the College of Humanities and Fine Arts and the College of Social and Behavioral Sciences.

Required:
Language:
Russian: 770:001; 770:002; 770:003; 770:004; 770:011; 770:012; 770:013; 770:014................................... 20 hours
One of the following literature courses:
Russian: 770:031; 770:102; 770:104; 770:132; 770:134.. 3 hours

Humanities: 680:121
Political Science: 944:123; 944:164.
Geography: 970:141.
Or other approved courses.
One of the following:
History: 960:169;960:170; 960:173; 960:188 .............. 3 hours
32 hours

## Women's Studies Minor

Women's Studies is an interdisciplinary program that places women at the center of inquiry to attain a fuller understanding of our world. Its unique perspective strengthens the abilities of students within any major to critically analyze theory and research while developing an ethicu of social responsibility. This program is offered under the jurisdiction and general supervision of the Deans of the Colleges of Social and Behavioral Sciences and Humanities and Fine Arts. For more informad tion, contact the Women's Studies office, Baker 168, 319-273-7102, or http://fp.uni.edu/womenstudies.

[^8]French: 720:031.
Science and Science Education: 820:140.
Social Sciences: 900:020; 900:023.
Political Science: 942:142; 944:130.
History: 960:131; 960:142; 960:143; 960:150; 960:156; 960:176; 960:180.
Sociology: 980:105; 980:123; 980:131; 980:135; 980:138;980:156; 980:171; 980:177.
Anthropology: 990:011; 990:157; 990:158;990:161;990:167.
In courses with multiple sections, the section which indicates a "Women's Studies Emphasis" will count for the minor.

These electives may also include individual department's readings, topics, experimental courses, internships, and other courses, as well as courses sponsored by the Individual Studies Program that directly relate to Women's Studies. The electives selected must have the written approval of the director to be filed in the Office of the Registrar before the final completion and approval of the minor. Sections approved for Women's Studies classes are listed in the front of the Schedule of Classes.

# Iowa Lakeside Laboratory 

## (Interinstitutional Program)

www.lakesidelab.org
Corrine Peterson, Interim Director

## Participating Faculty

University of Northern Iowa: David R. Mercer (Biology), Michael J. Shott (Sociology, Anthropology, and Criminology), Daryl D. Smith (Biology). Iowa State University: Patrick Brown (NREM), Lee Burras (Agronomy), C. Arthur Croyle (Art and Design), Charles D. Drewes (EEOB), Steven M. Herrnstadt (Art and Design), Steven Jungst (NREM), Clay L. Pierce (NREM), A. Sunday Tim (Ag/Biosystems Engineering), Arnold van der Valk (EEOB). University of Iowa: John F. Doershuk (Anthropology), Diana Horton (Biological Sciences).

For additional information see pages 11-12 and 274-276 in this publication or the Iowa Lakeside Laboratory Bulletin.

## Management

(Collage of Business Administration)

## www.cba.uni.adu/management

T. McAdams, Interim Head. L. Blockson, D. Cyphert, C. Das, T. Frost, P. Goulet, B. Hoffiman, A. Jedlicka, S. Kaparthi, R. Karsten, J. Mattingly, A. Mitra, F. Moussavi, H. Noonan-Day, D. Power, T. Rodriguez, R. Roth, G. F. Smith, M. Spencer, S. Wartick, L. Wilson, D. Wood, M. Wurtz

Note: Students majoring in Management, Management Information Systems (MIS) and Business Teaching must satisfy the College of Business Administration (CBA) admission requirements before they can officially declare their major. A copy of the Admission, Retention, and Graduation Policy may be obtained from the Advising and Student Services Office in the College of Business Administration. Prior to completion of the admission requirements, students may sign an intent to major in one of these areas and be classified as a prospective (pre)major. Pre-Management, Pre-MIS, or Pre-Business Teaching majors may enroll in lower division (below 100) business courses only. Enrollment in upper division
(100-level) business courses requires satisfactory completion of the CBA admission requirements and any course prerequisites.

Students majoring in Management and MIS are not permitted to declare a double major within the College of Business Administration (the Economics/General and Economics/Quantitative Techniques and Economics/Community Economic Development majors; and the Economics, Business Communication, and Business Teaching minors excepted). Also, not more than one emphasis area may be declared in Management.

Students majoring in Business Teaching may declare a double major and/or major and minor within the College of Business Administration, subject to the regulations imposed by those CBA departments affected. Business Teaching majors minoring within the CBA must select minors designated for business majors.

To graduate with a major in Management, Management Information Systems, or Business Teaching from the College of Business Administration, a student must earn at least $50 \%$ of the business credit hours required for the major at UNI. Students must take at least $50 \%$ of the course work required for the degree outside the College of Business Administration. Up to nine hours of economics (excluding 920:020), and six hours of statistics may be counted as outside the College of Business Administration. A student must earn a 2.20 cumulative grade point average at UNI; and earn an overall 2.20 grade point average in 120:xxx, 130:x00, 150:xox, 160:xxx, and 920:xox courses taken at UNI. In addition, Business Teaching majors must complete a total cumulative and cumulative UNI GPA of 2.50 or better. Students given permission to graduate out-of-residence must earn a 2.20 or better in all courses approved and accepted for out-of-residence credit.

The Management Department may impose additional admission requirements for students wishing to declare a minor or a second CBA major. Eligibility to declare a minor or a second CBA major is based on competitive GPA and space availability. Students may obtain a copy of these requirements from the Advising and Student Services Office (CBB 321 B ) in the College of Business Administration.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)


## Management Major

Required business core:
Accounting: 120:030; 120:031 ................................................ 6 hours
Marketing: 130:101 ............................................................... 3 hours
Management: 150:080; 150:100; 150:153; 150:154; 150:175 15 hours
Finance: 160:151 .................................................................. 3 hours
Economics: 920:020; 920:053; 920:054; 920:070 ................ 12 hours
Required:
Management: 150:163; 150:165 .......................................... 6 hours
Emphasis requirements (choose one area of emphasis)............ 12 hours
57 hours*
*In addition to the required 57 hours, 920:020 and 920:070 have as a prerequisite 800:072 or 800:092, either of which will satisfy Category 1C of the Liberal Arts Core.

## Emphases:

## 1. Business Administration

Group I-Choose two of the following three areas:
a) $150: 145$.
b) $150: 161$ or $150: 164$.
c) $150: 119$ or $150: 166$.

Group II-Choose one of the following courses:
a) 150:113.
b) 150:187.
c) $150: 189$.
d) $150: 174$.

Group III-Choose one of the following or any additional course from Group I or Group II:
Accounting: 120:129 or 120:131.
Marketing: $130: 106,130: 153$, or $130: 177$.
Finance: 160:152, 160:158, or $160: 161$.
Economics: 920:113, 920:160, or 920:175.
2. Human Resource Management

Required:
Management: 150:105; 150:166; 150:168.
Plus three hours to be selected from:
Management: 150:116; 150:130; 150:187.
3. Supply Chain and Operations

Required:
Marketing: 130:161.
Management: 150:161; 150:164; 150:167.

## Management Information Systems Major

## (Extended Program)

The Management Information Systems major requires a minimum of 125 total hours to graduate.

Required business core:
Accounting: 120:030; 120:031 ............................................... 6 hours
Marketing: 130:101............................................................. 3 hours
Management 150:080; 150:100; 150:153; 150:154; 150:175 ... 15 hours
Finance: 160:151 .................................................................... 3 hours
Economics: 920:020; 920:053; 920:054; 920:070 ................ 12 hours
Required courses:
Management: 150:032; 150:034 or 810:034; 150:112;
150:120; 150:125; 150:140
18 hours
Electives (managerial): 3 hours from the following..................... 3 hours
Management: $150: 113 ; 150: 130 ; 150: 163 ; 150: 165$.
Electives (technical): 3 hours from the following,o.............o.o.o.o. 3 hours
Management: 150:127; 150:128; 150:190.
Computer Science: 810:161 (without lab).
$\overline{63}$ hours*
"In addition to the required 63 hours, 920:020 and 920:070 have as a prerequisite $800: 072$ or $800: 092$, either of which will satisfy Category 1C of the Liberal Arts Core.

## Business Teaching Major

## (Extended Program)

The Business Teaching major requires a minimum of 132 total hourd to graduate.

Required business core:
Accounting: 120:030; 120:031 ............................................... 6 hours
Marketing: 130:101 ................................................................ 3 hours
Management: 150:080; 150:100; 150:153; 150:154; 150:175 ... 15 hours
Finance: 160:151 .................................................................. 3 hours
Economics: 920:020; 920:053; 920:054; 920:070 ................. 12 hours
Required:
Marketing: 130:106; 130:172 ............................................... 6 hours
Management: 150:075; 150:101; 150:113; 150:117; 150:191 13 hours 58 hourst
*In addition to the required 58 hours, $920: 020$ and $920: 070$ have as a prerequisite 800:072 or 800:092, either of which will satisfy Category 1C of the Liberal Arts Core. Business Teaching Majors may substitute both 920:053 and 920:054 for 920:024 to satisfy Category 5B of the Liberal Arts Core.

The Professional Education Requirements for the Business Teaching major include 32 hours in the following courses: 200:017; 200:030, $200: 128 ; 200: 148 ; 220: 150 ; 240: 020$ or $240: 031 ; 250: 150 ; 260: 119 ; 280: 070$; and 280:138.

## Business Communication Minor

This minor in business communication is interdisciplinary in nature and offered jointly by the College of Humanities and Fine Arts and the College of Business Administration. It is under the jurisdiction of the Department of Management and the Department of Communication Studies. The minor requires a 15 -hour core plus 5-6 hours from one of three emphases.

Required core:
Communication: 48C:071; 48C:132 ..................................... 6 hours
Journalism: 48):007 ................................................................ 3 hours
Management: 150:080
OR
English Language and Literature: 620:077 ........................... 3 hours
English Language and Literature: 620:102 or 620:104 or

Required: 5-6 hours from one of three emphases below ....." $\frac{5-6}{20-21}$ hours

## Emphases- <br> Business:

Management: 150:113; 150:114.
OR
Communication:
Two of the following:
Communication: 48C:031; 48C:139 or 48C:141; 48C:148*.
OR
Journalism and Public Relations:
Two of the following:
Journalism: 48J:071"; 48J:172*; 48J:176*.
Public Rélations: 48P:173*; 48P:184.
*These courses require additional prerequisites.
Note: When declaring this minor students must:
a) have a 2.70 cumulative GPA
b) have satisfactorily completed Categories 1A and 1B of the Liberal Arts Core.
Available to all UNI majors.
Business Teaching Minor
Required:
Accounting: 120:030; 120:031 ..... 6 hours
Marketing: 130:101; 130:106 ..... 6 hours
Management: 150:075; 150:080; 150:101; 150:102; 150:117; 150:191 ..... 15 hours
Economics: 920:053* ..... 3 hours
30 hours
*Category 5B of the Liberal Arts Core may be satisfied by taking both 920:053 and 920:054.

## General Business Concepts Minor

Required:
Accounting: 120:030 ............................................................ 3 hours
Marketing: 130:101 .............................................................. 3 hours
Management: 150:080; 150:100; 150:153 ............................ 9 hours
Economics: 920:024 or equivalent; 920:070 ....................... 6 hours
21 hours*
NOT available to majors in: Accounting, Business Teaching, Eco-nomics-Business Analysis Emphasis, Finance, Management, Management Information Systems, Marketing, and Real Estate.
*In addition to the required 21 hours, $920: 070$ has as a prerequisite 800:072 or 800:092, either of which will satisfy Category 1C of the Liberal Arts Core.

## Program Certificates

For information on the following program certificate, see page 131 or contact the department office.

## Training and Development in Business Certificate

## Expanded Career Option for Secondary Teacher Licensure

## (Available to non-teaching business majors only.)

Majors in Accounting, Economics: Business Analysis, Finance, Management, Management Information Systems, Marketing, and Real Estate in the College of Business Administration have the option of receiving secondary teaching licensure to teach in up to three business areas. A student may complete this option by taking the required licensing courses as general university electives. The total number of hours required for licensure will be 48 . This will expand the student's program beyond the normal eight semesters. Specific licensure requirements and information about this expanded career option may be obtained from the Department of Management.

## Other Licensure Options

Additional vocational licensure is available in office education, marketing education, and multi-occupations.

## Marketing

## (College of Business Administration)

www.cha.uni.edu/marketing<br>M. Sheffet, Head. M. Bunker, P. Chao, D. Clayson, S. Corbin, K. Iyer, M. Klassen, K. Rajendran, M. Rawwas.

Note: Students majoring in Marketing must satisfy the College of Busi-
ness Administration (CBA) admission requirements before they can officially declare their major. A copy of the Admission, Retention, and Graduation Policy may be obtained from the Advising and Student Services Office in the College of Business Administration. Prior to completion of the admission requirements, students may sign an intent to major in Marketing and be classified as a prospective (pre)major. Pre-Marketing majors may enroll in lower division (below 100) business courses only. Enrollment in upper division ( 100 -level) business courses requires satisfactory completion of the CBA admission requirements and any course prerequisites.

Marketing majors may declare a double major, double minor, and/or major and minor within the College of Business Administration, subject to the regulations imposed by those CBA departments affected. Marketing majors minoring within the CBA must select minors designated for business majors. Marketing majors may not declare more than one emphasis in Marketing.

To graduate with a major in Marketing from the College of Business Administration, a student must earn at least $50 \%$ of the business credit hours required for the major at UNI. In addition, a minimum of nine graded hours must be earned in 100 -level, UNI Marketing courses. Students must take at least $50 \%$ of the course work required for the degree outside the College of Business Administration. Up to nine hours of economics (excluding 920:020), and six hours of statistics may be counted as outside the College of Business Administration. A student must earn a 2.20 çmulative grade point average at UNI ; and earn an overall 2.20 grade point average in 120:xxx, 130:xxx; 150:xxx, 160:xxx, and 920:xxx courses taken at UNI. Students given permission to graduate out-of-residence must earn a 2.20 or better in all courses approved and accepted for out-of-residence credit.

The Marketing Department may impose additional admission requirements for students wishing to declare a minor or a second CBA major. Eligibility to declare a minor or a second CBA major is based on competitive GPA and space availability. Students may obtain a copy of these requirements from the Advising and Student Services Office (CBB 321B) in the College of Business Administration.

## Bachelor of Arts Degree Programs

- 120 semester hours


## Chemistry-Marketing Major

This program is an interdisciplinary major offered by the Department of Chemistry and the College of Business Administration, and is under the jurisdiction of the Department of Chemistry. The Department of Chemistry is responsible for advising students enrolled in the major. Required for the major are 24-27 semester hours in chemistry and 24 hours of business for a total of $\mathbf{4 8}$-51 hours. See page 73 for complete details of the major program.

## Marketing Major

Required business core:
Accounting: 120:030; 120:031 .............................................. 6 hours
Marketing: 130:101............................................................. 3 hours
Management: 150:080; 150:100; 150:153; 150:154; 150:175 15 hours
Finance: 160:151 ................................................................... 3 hours
Economics: 920:020; 920:053; 920:054; 920:070................ 12 hours
Required:
Marketing: 130:106; 130:108; 130:191 .................................. 9 hours
Marketing emphasis area (select one emphasis area below)... 9 hours
57 hours*

1. General Marketing

Marketing electives: (9 hours)
130:131; 130:142; 130:150; 130:153; 130:160;130:161; 130:166; 130:169; 130:172; 130:173; 130:177; 130:178; 130:182; 130:187.
2. Marketing Management

Required: (6 hours) 130:131; 130:177.
Marketing electives: ( 3 hours) $130: 142 ; 130: 150 ; 130: 153 ; 130: 160 ; 130: 161 ; 130: 166 ;$ 130:169; 130:172; 130:173; 130:178; 130:182; 130:187.
3. Services Marketing

Required: (6 hours) 130:166; 130:178.
Marketing electives: ( 3 hours) 130:131; 130:142; 130:150; 130:153; 130:160; 130:161; 130:169; 130:172; 130:173; 130:177; 130:182; 130:187.
4. Sales and Advertising

Required: (6 hours) 130:150; 130:153.
Marketing electives: ( 3 hours) 130:131; 130:142; 130:160; 130:161; 130:166; 130:169; 130:172; 130:173; 130:177; 130:178; 130:182; 130:187.
*In addition to the required 57 hours, both 920:020 and 920:070 have a prerequisite of either 800:072 or 800:092, either of which will satisfy Category 1C of the Liberal Arts Core.

## Marketing Minor

Required:
Marketing: 130:101* ............................................................ 3 hours

Marketing electives: three courses from the following ........ 9 hours I30:106, 130:131, 130:142, 130:150, 130:153, 130:160, 130:161, 130:166, 130:170, 130:177, 130:178, 130:187.
Business electives: two courses from the following.............. 6 hours Accounting: 120:030.
Management: 150:153.
Finance: 160:055
21 hours
NOT available to majors in: Accounting, Business Teaching, Eco-nomics-Business Analysis Emphasis, Finance, Management, Management Information Systems, Marketing, and Real Estate.
*130:101 has a prerequisite of either 920:024 or 920:053. 920:024 or both 920:053 and $920: 054$ will satisfy Category 5B of the Liberal Arts Core.

## Program Certificate

For information on the following program certificates, see page 131 or contact the department office.

Certificate in Entrepreneurship
Certificate in Marketing Research and Consulting

## Mathematics

## (College of Natural Sciences)

## www.math.uni.edu/

J. Ridenhour, Head. J. Aubrey, R. Campbell, D. Duncan, M. Ecker, T. Eisworth, J. Haack, S. Kirmani, M. Lee, L. Leutzinger, C. Miller, D. Mupasiri, G. Nelson, M. Prophet, E. Rathmell, V. Rayevskaya, J. Ribando, S. Riehl, D. Shaw, N. Silkin, M. Somodi, A. Stanley, D. Thiessen, J. Wilkinson, K. Yang.

## Notes:

1. A student majoring or minoring in mathematics, who has a grade, point average of less than 2.25 in all departmental courses used for that major or minor may not apply to her/his major or minor a departmental course in which a grade of less than $\mathbf{C}$ - is earned.
2. Undergraduate students who have been admitted to the universil provisionally because of non-satisfaction of the high school math ematics requirements may not enroll in any mathematics credil course before this requirement has been met.
3. Students who complete the requirements for more than one program (major or minor) within mathematics may have that noted on their transcripts.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)
- 130 semester hours (Teaching)


## Mathematics Major

Required:
Mathematics:
Common core: 800:060; 800:061; 800:062; 800:076 .. 15 hour Mathematics core: 800:140; 800:141; 800:160; 800:162 12 hour
Electives .. 12-13 hours
Mathematics: either $800: 194$ and four courses as described below, or 800:195 and three courses as described below. One course must be from each of Groups I, II, III. If a fourth course is required, it may be either any other course from Groups I, II, III, or any course that has one of the courses from Groups I, II, and III as a prerequisite. Group I: 800:155; 800:161; 800:165; 800:167. Group II: 800:142; 800:149; 800:152; 800:156; 800:176".
Group III: 800:144; 800:169; 800:180; 800:181; 800:182; 800:185.

39-40 houre
*800:176 requires 810:034, 810:035, or 810:036.

## Mathematics Major-Applied

Required: Mathematics:

Common core: 800:060; 800:061; 800:062; 800:076 .. 15 hours Applied core: 800:074; 800:140; 800:149; 800:176..... 18 hours Two of the following: $800: 141 ; 800: 150 ; 800: 178$. Computer Science: 810:034 or 810:036. 3 hours
Electives $\qquad$ 9-10 hours
Mathematics: Either 800:194 and three of the courses listed below, or $800: 195$ and two of the courses listed below. The course 800:141, 800:150, 800:178 not taken in the applied core. 800:142, 800:152, 800:154, 800:155, 800:156, 800:160, 800:161, 800:167, 800:171, 800:174, 800:175, 800:177, 800:184, 800:187.

45-46 hours
Note: The Liberal Arts Core requirement 1 C is to be met by either 800: 072 or $800: 092$; a student who does not satisfy 1 C by 800:072 is requirel to select 800:174 in the elective category.

## Mathematics Major-Statistics and Actuarial Science

Required:<br>Mathematics:<br>Common core: 800:060; 800:061; 800:062; 800:076 .. 15 hours Statistics core: 800:072; 800:121; 800:152; 800:174; 800:175<br>15 hours<br>Computer Science: 810:030 or 810:035 or 810:036 or 810:061 . $3-4$ hours<br>$\qquad$<br>Mathematics: either 800:194 and at least 9 credit hours from the following, or $800: 195$ and at least 6 credit hours from the following: 800:080; 800:146 (to a maximum of 3 credit hours); $800 ; 153 ; 800: 154$; 800:157; 800:158; 800:170; 800:171; 800:176; 800:177; 800:196..<br>42-43 hours

## Mathematics Major-Teaching

Required:
Mathematics:
Common core: 800:060; 800:061; 800:062; 800:076 ... 15 hours
Teaching core: 800:092; 800:160; 800:165; 800:173;
$800: 180 ; 800: 188 ; 800: 190$; two of the
following - 800:144, 800:162, 800:189
27 hours
Mathematics: 800:096
or
Computer Science: 810:030 or 810:035 or 810:036 or 810:061 3-4 hours 45-46 hours
For departmental approval to student teach, a student on the program must satisfy the university requirements to student teach and the following specific departmental requirements:

1. Must successfully complete $800: 062 ; 800: 076 ; 800: 160 ; 800: 165 ; 800: 188$; 800:190; and one of 800:096, 810:030, 810:035, 810:036, or 810:061.
2. All grades in departmental courses to be applied to this program must be C- or higher unless the student's grade point average is 2.25 or higher in all the departmental courses to be applied to this program.

## Mathematics Minor

Required:
Mathematics: 800:060; 800:061; 800:076 ........................... 11 hours
Electives from the following...................................................................... 12 hours
Mathematics: 800:062, 800:074, 800:141, 800:142, $800: 143,800: 144,800: 149,800: 150,800: 152$, 800:154, 800:155, 800:156, 800:157, 800:158, 800:160, 800:161, 800:162, 800:165, 800:167, 800:168, 800:169, 800:173, 800:174, 800:175, $800: 176,800: 177,800: 178,800: 180,800: 181$, $800: 182,800: 184,800: 185,800: 187,800: 189$, 800:193, 800:196.

## Mathematics Minor-Teaching

Required:
Mathematics: 800:060; 800:061; 800:072 or 800:173; 800:076; 800:160; 800:165; 800:188; 800:190 26 hours
Mathematics: 800:096
or
Computer Science: 810:030 or 810:035 or 810:036 or 810:061

3-4 hours
Electives from the following........................................................ 3-4 hours
Mathematics: 800:062, 800:074, $800: 144,800: 169$, 800:180, 800:182.

32-33 hours

## Mathematics Minor (K-6)-Teaching

Required:
One of the following three Liberal Arts Core courses $\qquad$ 3 hours Mathematics: 800:023; 800:072; 800:092.
Mathematics: 800:030; 800:037; 800:111; 800:112; 800:113; 800:114 20 hours
One of the following two courses ......................................... 1 hour
Mathematics: 800:137; 800:192. 24 hours

## Statistics and Actuarial Science Minor

Required:
Mathematics: 800:060; 800:061; 800:072; 800:152 ............. 14 hours

## Electives

 9 hoursMathematics: 800:062, 800:076, 800:080, 800:146, $800: 154,800: 157,800: 158,800: 171,800: 174,800: 175$, 800:177, 800:196.

23 hours

## Military Science

## www.uni.edu/armyrotc

R. Stavnes, Head. R. Albrecht, K. Lostroh.

General-The Department of Military Science administers the Army Reserve Officers' Training Corps (ROTC) program at the University of Northern Iowa. Credits earned in the Department count as general elective credits toward baccalaureate degree requirements or a minor in Military Science. All instructors in the Department are career U.S. Army Officers. The course of instruction is designed to be a four-year program. Students with prior military experience may be allowed to complete the program in two years. Students who desire to receive a commission as an officer in the U.S. Army will be required to contract with the Department of the Army during the final two years of the course. They will receive $\$ 4,500$ per year stipend for two years and will incur a service obligation upon graduation.

The Four-Year Program-The ROTC program is divided into two parts: the Basic Course and the Advanced Course each lasting two years. Students may be allowed to waive the Basic Course requirements with Department Head approval.

## Required:

Basic Course: 080:091; 080:092; 080:094; 080:095 .............. 6 hours
Advanced Course: 080:116; 080:117; 080:118; 080:119 ..... 12 hours
$\qquad$
3 hours selected from each of the following fields: Written Communication, Human Behavior, Military History, Computer Literacy, Math Reasoning. (Liberal Arts Core courses taken in these areas are accepted as meeting the elective credit requirements.) -
For a student to receive a commission, s(he) must receive credit for the Basic Course and are required to take the Advanced Course. A Military Science minor is offered and consists of the following requirements:

## Military Science Minor

Required:
Military Science: 080:091*; 080:092*; 080:094*; 080:095*; 080:116; 080:117; 080:118; 080:119

18 hours
Electives
3 hours selected from each of the following fields: Written Communication, Human Behavior, Military History, Computer Literacy, Math Reasoning, Management, Security Studies.

* Requirement may be waived by the Department Head.

The Simultaneous Membership Program. The Simultaneous Membership Program (SMP) allows contracted cadets to be members of the Iowa National Guard or the Army Reserve and Army ROTC simultaneously.

ROTC SMP cadets are paid at the rate of a Sergeant (E-5) for their one weekend a month training assemblies, plus up to $\$ 250$ a month for 36 months in New G.I. Bill educational assistance benefits. Many ROTC SMP cadets also qualify for the Student Loan Repayment Program or tuition assistance.

ROTC Scholarships. U.S. Army ROTC two-, three-, and four-year scholarships are available. They cover all tuition and required educational fees at UNI, and provide $\$ 300$ per semester for textbooks, supplies, and equipment.

Army ROTC scholarships also provide a subsistence allowance of up to $\$ 3,600$ for each school year that the scholarship is in effect. Winning and accepting an ROTC scholarship does not preclude accepting other scholarships. See pages 21-22 of this bulletin for more information about U.S. Army ROTC scholarships.
G.I. Bill. Students participating in the Simultaneous Membership Program are entitled to the New G.I. Bill educational assistance benefits. Receiving the New G.I. Bill educational assistance benefits does not preclude a student from accepting an ROTC Scholarship for the same period. Many students receiving the New G.I. Bill also qualify for the Student Loan Repayment Program.

Veterans. Veterans receive advanced placement credit for the entire Basic Course. Veterans receive an ROTC allowance in addition to their G.I. Bill benefits.

Special Schools. Both Basic and Advanced Course students can volunteer to attend special military schools such as Airborne School, Northern Warfare Training, or Air Assault Training.

Financial Assistance. As a minimum, all Advanced Course ROTC students receive \$250-350 per month for each month of school (for up to 10 months per year) as a tax-free allowance. Students on scholarship, participating in the Simultaneous Membership Program, and veterans, will earn additional compensations as enumerated above. Students attending special training, such as The Military Leadership Practicum, receive a travel allowance and are paid while receiving the training. Uniforms and
books for all classes taught by the Military Science Department are furnished, and a tax-free uniform allowance is provided to all students who complete the Advanced Course.

Additional Information. Additional information about the specifid courses offered by the Department of Military Science is found on page 186 of this bulletin, under Military Science. For additional information write to the University of Northern Iowa, Department of Military Science, Cedar Falls, IA 50614-0142; come in person to West Gym 203, UNI campus; or call the student advisor at 319-273-6337. Please visit our Web site at www. uni.edu/armyrotc.

## Modern Languages

## (College of Humanities and Fine Arts)

## www.uni.edu/modlangs

M. Basom, Head. J. Balong, R. Bubser, J. Castillo, J. Cooley, I. Cuadr
D. Heistad, J. Koppensteiner, R. Krueger, A. Lair, A. Planells, S. Rosell, F. Vernescu, N. Vernon, S. Wildner, S. Yetter.

Note: Major programs available in single or dual language include Frenchy German, Portuguese, Russian, Spanish, and the Modern Languages Sube ject Field for the Middle Level Education Major. Minors include French German, Portuguese, Russian, and Spanish. Courses are offered in all of the above languages, plus Chinese and Japanese.

Two interdepartmental programs are offered cooperatively with the Department of English Language and Literature and are listed on page89. These programs are TESOL/Modern Language Major-Teaching, and the Comparative Literature Minor.

The European Studies major is an interdisciplinary program offered jointly by the College of Humanities and Fine Arts and the College of Sor cial and Behavioral Sciences and is under the jurisdiction of the heads of the Department of Modern Languages and the Department of History,

A student who has been enrolled previously in a foreign language at this institution will be advised by her/his instructor as to the sequence of succeeding courses.

A student who has never had a foreign language should enroll in the Elementary I or Introduction I course.

The previous background and facility in acquiring basic skills of the individual student may necessitate taking additional work in lower division courses which are not specified in the major.

The total program hours will depend on the student's background and will vary.

Licensure to teach a modern language in elementary school can be achieved by majoring in Elementary Education and taking the teachind minor in the relevant language.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)
- 130 semester hours (Teaching)


## European Studies Major

This is an interdisciplinary program offered jointly by the Collegt of Social and Behavioral Sciences and the College of Humanities and Fine Arts, and is under the jurisdiction of the heads of the Department of History and Modern Languages, and can only be elected as a second major with a major in history or a major in a foreign language (Frencly) German, Portuguese, Russian, and Spanish) or Russian and East European Studies.

Required core courses:
Philosophy: 650:101 or 650:103 or 650:104 .......................... 3 hours
Humanities: 680:021 3 hours
History: one course from Category A (960:101, $960: 103,960: 123,960: 151,960: 152,960: 153$, $960: 158,960: 164,960: 171,960: 173) ; 960: 156 ;$ 960:170 (for students in Russian) or 960:172 (for students in German) or 960:174 (for students in French) or 960:186 (Studies in History: Portugal, for students in Portuguese) or 960:186 (Studies in History: Spain, for students in Spanish) or 960:165 (for students with an emphasis in English history)..... 9 hours Electives in history, political science, economics or geography -approved by advisor ( 6 hours must be taken outside of history) . 9 hours
Foreign Language component*.................................................. 22 hours
22 hours beyond first-year French, German, Portuguese, Russian or Spanish, to include:
French: 720:101; 720:104; 720:124 or 720:125.
or
German: 740:101; 740:104; 740:123 or 740:150.
or
Russian: 770:101; 770:102; 770:141.
or
Spanish: 780:101; 780:104; 780:123.
or
Portuguese: 790:101; 790:123. To include 4 hours from 790:109; 790:186; 790:191; 790:198.
One 3-hour course in translation, literature or TESOL/Applied Linguistics.
One summer's study abroad in Europe required for students in French, German, and Spanish and highly recommended for students in Portuguese and Russian. Required for students emphasizing English history and language: one summer's study abroad in the British Isles.

46 hours
*With permission, students emphasizing the British Isles may substitute Gaelic, Old or Middle English for this requirement.

## Modern Languages Dual Major

Choose two from French/German/Portuguese/Russian/Spanish.
Required: a minimum of 21 semester hours, more advanced than the elementary/introduction level, in each of two languages for a total of 42 semester hours. At least 15 hours in each language must be in courses numbered 100 or higher.

Specific requirement per language:
French: A minimum of 21 semester hours in French in courses more advanced than 720:002 and 720:004, including 720:101 and 720:104, at least 15 hours must be in courses numbered 100 or higher, including at least one course from each of the following groups:
a. 720:124; 720:125.
b. 720:108; 720:161; 720:185.
c. 720:114; 720:122; 720:128; 720:144.

German: A minimum of 21 semester hours in German in courses more advanced than 740:002 and 740:004, including 740:101, 740:103,
and 740:104 or 740:031, at least 15 hours must be in courses numbered 100 or higher, including at least one course from each of the following groups:
a. 740:121; 740:123; 740:150.
b. 740:160; 740:185.
c. 740:116; 740:122; 740:127; 740:128; 740:143; 740:147.

Portuguese: A minimum of 21 semester hours in Portuguese in courses more advanced than 790:001, including 790:101; with electives from among 720:104, 780:104, 790:002, 790:010, 790:020, 790:031 (or any 620:031 section cross listed with 790:031), 790:060, 790:101, 790:109, 790:123, 790:133, 790:140, 790:179, 790:180, 790:186, 790:191, 790:198, 790:199. At least 15 hours must be in ourses numbered 100 or higher.
Russian: A minimum of 21 semester hours in Russian in courses more advanced than 770:002 and 770:004, including 770:101, 770:103, 770:196. At least 15 hours must be in courses numbered 100 or higher.
Spanish: A minimum of 21 semester hours in Spanish in courses more advanced than 780:002, including 780:101**, 780:104 or 780:105, and 780:107 and 780:108, at least 15 hours must be in courses numbered 100 or higher, including at least one course from group $a$ and one course from group $b$. A maximum of 6 hours of course work in translation may be counted toward a major in Spanish.
a. 780:120; 780:123; 780:127; 780:152.
b. 780:112; 780:118; 780:145; 780:146; 780:147.
**The requirement for 780:101 may be replaced by 780:150 in either a
UNI or an lowa Regents program abroad.

## Modern Languages Dual Major Teaching

## (Extended Program)

The Modern Languages Dual Major in Teaching requires a minimum of 139 total hours to graduate.

Students successfully completing this major will be eligible for licensure/endorsement in two languages. Choose two from French/ German/Portuguese (endorsement only)/Russian (endorsement only)/ Spanish.

## Required:

Languages: 700:190; 700:193 ............................................. 5 hours
Practicum in one of the languages: 720/740/770/780/
$790: 191$.................................................................. 2 hours
Students must have a minimum of $30^{*}$ semester hours
in one language and a minimum of 24 semester
hours in another. In each language, at least 21 hours
must be more advanced than the elementary/
introduction level, 15 hours must be in courses
numbered 100 or higher. $\AA$ total of 59 semester
hours is required.

59 hours

Specific requirement per language:
French: A minimum of 24 (*or 30) semester hours in French, with at least 21 more advanced than 720:002 and 720:004, including 720:101 and 720:104, at least 15 hours must be in courses numbered 100 or higher, including at least one course from each of the following groups:
a. 720:124; 720:125.
b. 720:108; 720:161; 720:185.
c. 720:114; 720:122; 720:128; 720:144.

German: A minimum of 24 (*or 30) semester hours in German, with at least 21 more advanced than 740:002 and 740:004, including 740:101, 740:103, and 740:104 or 740:031, at least 15 hours must be in courses numbered 100 or higher, including at least one course from each of the following groups:
a. 740:121; 740:123; 740:150.
b. 740:160; 740:185.
c. 740:116; 740:122; 740:127; 740:128; 740:143; 740:147.

Portuguese: A minimum of 24 semester hours in Portuguese, with at least 21 more advanced than 790:001, including 790:101; with electives from among 720:104, 780:104, 790:002, 790:010, 790:020, 790:031 (or any 620:031 section cross listed with 790:031), 790:060, 790:101, 790:109, 790:123, 790:133, 790:140, 790:179, 790:180, $790: 186,790: 191,790: 198,790: 199$. At least 15 hours must be in courses numbered 100 or higher.
Russian: A minimum of 24 semester hours in Russian, with at least 21 more advanced than 770:002 and 770:004, including 770:101, $770: 103,770: 196$, at least 15 hours must be in courses numbered 100 or higher.
Spanish: A minimum of 24 (*or 30) semester hours in Spanish, with at least 21 more advanced than 780:002, including 780:101*, 780:104 or 780:105, and 780:107 and 780:108, at least 15 hours must be in courses numbered 100 or higher, including at least one course from group a and one course from group b. A maximum of 6 hours of course work in translation may be counted toward a major in Spanish.
a. 780:120; 780:123; 780:127; 780:152.
b. 780:112; 780:118; 780:145; 780:146; 780:147.
*The requirement for 780:101 may be replaced by 780:150 in either a UN1 or an Iowa Regents program abroad.

## French Major

Required:
French: a minimum of 33 semester hours in French in courses more advanced than 720:002 and 720:004, including 720:101, 720:103, and 720:104, of which at least 24 hours must be in courses numbered 100 or higher.

## Emphases:

1. Liberal arts
(choose at least one course from each category):
a. 720:124; 720:125.
b. 720:108; 720:161; 720:185.
c. 720:114; 720:122; 720:128; 720:144.
2. Business

Required: 720:102; 720:111; 720:124 or 720:125; 720:181.

## French Major-Teaching

Required: a minimum of 38 semester hours as follows: Methods: 700:190 (3 hrs.); 700:193 (2 hrs.) 5 hours
French: a minimum of 33 semester hours in French in courses more advanced than 720:002 and 720:004, including 720:101, 720:103*, 720:104, and 720:191 ( 2 hrs .) of which at least 24 hours must be in courses numbered 100 or higher, and including at least one course from each of the following groups 33 hours
a. 720:124; 720:125.
b. 720:108; 720:161; 720:185.
c. $720: 114 ; 720: 122 ; 720: 128 ; 720: 144$.
*The requirement for 720:103 may be fulfilled by participation in either a UN1 or an Iowa Regents program abroad.

## French Minor

Required:
French: 720:101 or 720:103
3 hours
18 hours in French in courses more advanced than 720:002 and 720:004 18 hours 21 hours

## French Minor-Teaching

Required:
Methods: 700:190 ( 3 hrs.); 700:193 (2 hrs.) ........................ 5 hours
French: 720:101; 720:191 (2-3 hrs.) ..................................5-6 hours
18-19 hours in French courses more advanced than 720:002 and 720:004. $\qquad$ 18-19 hours 29 hours

## German Major

Required:
German: a minimum of 33 semester hours in German in courses more advanced than 740:002 and 740:004, including 740:101, 740:103, and 740:104 or 740:031, of which at least 24 hours must be in courses numbered 100 or higher.

## Emphases:

## 1. Liberal Arts

Choose at least one course from each category:
a. 740:102; 740:185.
b. 740:121; 740:123; 740:150; 740:160.
c. 740:116; 740:122; 740:127; 740:128; 740:143; 740:147.

## 2. Business

Required: 740:111; 740:181.
Choose at least 2 courses from 740:102, 740:121, 740:123, 740:150, 740:185.

## German Major-Teaching

Required: a minimum of 38 semester hours as follows:
Methods: 700:190 (3 hrs.); 700:193 (2 hrs.) $\qquad$ 5 hours
German: a minimum of 33 semester hours in German in courses more advanced than 740:002 and 740:004, including 740:101 ( 3 hrs .), 740:103 (3 hrs.), 740:104 or 740:031, and 740:191 (2 hrs.), of which at least 24 hours must be in courses numbered 100 or higher 33 hours
Choose at least one course from each category:
a. 740:102; 740:185.
b. 740:121; 740:123; 740:150; 740:160.
c. $740: 116 ; 740: 122 ; 740: 127 ; 740: 128 ; 740: 143 ; 740: 147$.

38 hours

## German Minor

## Required:

German: 740:101; 740:103................................................... 6 hours 15 hours in German in courses more advanced than
740:002 and 740:004 ......................................... 15 hours 21 hours

## German Minor-Teaching

## Required:

Methods: 700:190 ( 3 hrs.); 700:193 ( 2 hrs.) .......................... 5 hours
German: 740:101; 740:103; 740:191 (2 hrs.) ....................... 8 hours 16 hours in German in courses more advanced than
$740: 002$ and $740: 004$.................................................. $\frac{16}{29}$ hours
29 hours

## Portuguese Minor

Required:
Portuguese: 790:001 or 790:140 ..... 3 hours

16 hours more advanced than 790:001 or 790:140, from 790:010; 790:020; 790:031 (any 620:031 section cross listed with 790:031); 790:060; 790:101; 790:109; 790:123; 790:133, 790:179; 790:180; 790:186; 790:191; 790:198 $\qquad$ 16 hours 19 hours A final essay and interview are required.

## Portuguese Minor-Teaching

Required:
Methods: 700:190 (3 hrs.); 700:193 (2 hrs.) ........................... 5 hours
Portuguese: 790:101; 790:191.............................................. 5 hours
19 hours in Portuguese above 790:001 ....................... 19 hours 29 hours

## Russian Major

Required:
Russian: a minimum of 33 semester hours in Russian courses more advanced than 770:002 and 770:004, including 770:101, 770:103, and 770:196, of which at least 23 hours must be courses numbered 100 or higher, and including at least one course from each of the following groups:
a. 770:141; 770:142.
b. 770:102; 770:104.
c. 770:132; 770:134.

33 hours

## Russian Minor

Required:
Russian: $\mathbf{2 1}$ hours in courses in Russian more advanced than

- 770:002 and 770:004. 21 hours

Russian Minor-Teaching<br>Required:<br>Methods: 700:190 (3 hrs.); 700:193 (2 hrs.)<br>......................... 5 hours<br>Russian: 24 hours in courses in Russian more advanced<br>than 770:002 and 770:004, including 770:191<br>(2-3 hrs.) ............................................................................. 24 hours<br>29 hours

## Spanish Major

## Required:

Spanish: a minimum of 33 semester hours in Spanish courses more advanced than 780:002, including 780:101*, 780:104 or 780:105, 780:107 and 780:108, 780:112 or 780:118, and 780:131 or 780:135, of which at least 26 hours must be in courses numbered 100 or higher (may include 790:140), and including at least one course from group a and one course from group $b$.
a. 780:120; 780:123; 780:127; 780:152. b. 780:145; 780:146; 780:147; 780:162; 780:163; 780:164; 780:166.

## 33 hours

*The requirement for 780:101 may be replaced by 780:150 in either a UNI or an Iowa Regents program abroad.

## Spanish Major-Teaching

Required: a minimum of 38 semester hours as follows: Methods: 700:190 (3 hrs.); 700:193 (2 hrs.) $\qquad$ 5 hours
Spanish: a minimum of 33 semester hours in Spanish courses more advanced than 780:002, including 780:101*, 780:104 or 780:105**, 780:107 and 780:108, 780:112 or 780:118, 780:131 or 780:135, and 780:191, of which at least 26 hours must be in courses numbered 100 or higher, (may include 790:140) and including at least one course from group a and one course from group b. 33 hours
a. 780:120; 780:123; 780:127; 780:152.
b. 780:145; 780:146; 780:147; 780:162; 780:163; 780:164; 780:166

$$
\overline{38} \text { hours }
$$

*The requirement for 780:101 may be replaced by 780:150 in either a UNI or an Iowa Regents program abroad.
**780:105 is highly recommended for teaching majors.

## Spanish Minor

Required:
Spanish: 780:101
3 hours
3 hours in Spanish courses more advanced than 780:101 ............................................................... 3 hours
15 hours in Spanish in courses more advanced than 780:002 15 hours

## 21 hours

## Spanish Minor-Teaching

Required:
Methods: 700:190 ( 3 hrs.); 700:193 (2 hrs.) .......................... 5 hours

3 hours in Spanish in courses more advanced than

14-16 hours in Spanish in courses more advanced than 780:002. .14-16 hours 29 hours

## Program Certificates

For information on the following program certificates, see pages 131-132 or contact the department office.

Certificate in French Language Studies Certificate in German Language Studies Certificate in Hispanic and Portuguese Studies<br>Certificate in Portuguese Studies<br>Certificate in Russian Language Studies<br>Certificate in Spanish Language Studies<br>Certificate in Spanish for Special Purposes<br>International Commerce Certificate<br>Certificate in Translation (in French, German, Portuguese,<br>Russian, or Spanish)

## School of Music

## (College of Humanities and Fine Arts)

## www.uni.edu/music

J. Vallentine, Director. H. Aibel, B. Barrett, T. Barry, D. Buch, R. Burkhardt, J. Chenoweth, R. Chesnutt, W. Cho, A. Floyd, J. Funderburk, R. Grabowski,
J. Graham, R. Guy, F. Halgedahl, R. Hogancamp, L. Jernigan, R. Johnson, N. Lamartine, J. McDonald, C. Merz, J. Mishra, L. Morgan, M. Pinto, D. Rachor, A. Schmits, J. Schwabe, W. Shepherd, D. Taylor, J. Trahan, T. Tritle, S. Walden, R. Washut.

The School of Music offers majors and minors under two baccalaureate degrees: the Bachelor of Arts and the Bachelor of Music. These include:

Bachelor of Arts -

Bachelor of Music -

Music Major<br>Jazz Studies Minor<br>Music Minor<br>Composition-Theory Major<br>Music Education Major<br>Performance Major

The Music major under the Bachelor of Arts degree is a liberal arts program for the student interested in combining the discipline of music training with the breadth offered by a liberal arts curriculum.

The Composition-Theory and Performance majors are professional degrees designed to prepare the student for 1) a career as an artist-performer, or 2) entrance to graduate schools where further excellence in a performance area might be pursued. The Music Education major prepares the student for a teaching career and provides licensure in music for grades K-6 and 7-12.

## General Requirements for Undergraduate Majors

Music majors on all degree programs must choose an area of applied music (540:xox) for specialization and must meet the proficiency standards of the School of Music. The total required applied hours indicated for each major must be completed on one of the specialization instruments or voice on which the student auditioned. Dividing the required applied hours among various instruments, or voice and instrument(s), will not satisfy the applied music portion of any of the degree programs.

Auditions: Admission to the School of Music requires successful completion of an audition in the main performance area.

Piano Proficiency: Required of all majors. All freshmen will enroll in group piano class or applied piano continuously (semester by semester) until piano proficiency has been passed. For Music Education majors, requirements must be completed prior to student teaching.

## Bachelor of Arts Degree Programs

-120 semester hours

## Music Major

Required:

$$
\begin{aligned}
& \text { Applied Music (540:xox), including at least } 4 \text { hours of } \\
& \text { 100-level work in major area .................................... } 16 \text { hours } \\
& \text { Music Theory: 580:011; 580:012; 580:013; 580:014; } \\
& 580: 015 ; 580: 016 ; 580: 017 ; 580: 018 ; 580: 025 ; \\
& 580: 026 ; 580: 027 ; 580: 028 \text {........................................ } 16 \text { hours }
\end{aligned}
$$

Music History and Musicology: 590:005; 590:010; 590:011 8 hours
Electives in music (limited to 100 -level courses in the following areas only: 560:xax; 570:xac; 580:xoc; 590:xox; 595:xax) ... 6 hours 46 hours
Additional requirements: senior recital (half recital) - (may take the form of a performance, composition, or an essay). Students who choose composition as their concentration will elect $580: 110,580: 120$, and 580:121 and will increase their hours in the major to 48 . Musical Acoustics, $880: 142$, may be substituted for a 100 -level music elective. Up to two credit hours of large ensemble, 530:1xx, may be counted toward the 100 -level music elective.

## Jazz Studies Minor

## Required:

Music, Organizations and Ensembles: 530:×16 (Jazz Bands and Combos). 6 hours
Applied Music (540:xxx) ..... 4 hours
Music Techniques: 560:152 ..... 3 hours
Music Theory: 580:127; 580:128; 580:132 ..... 5 hours
Music History and Musicology: 590:160 ..... 3 hours
21 hours
Music Minor
Required:
Music, Organizations and Ensembles (530:xox) ..... 2 hours
Applied Music (540:xox) ..... 4 hours
Music Theory: 580:011; 580:012; 580:015; 580:016; 580:025; 580:026 ..... 8 hours
Music History and Musicology: 590:005 ..... 2 hours
Electives in music (560:xxx; 570:xcx; 580:xcx; 590:xax; 595:xox) ..... 8 hours
24 hours

Departmental audition requirements apply to this minor.

# Bachelor of Music Degree <br> Programs 

\author{

- 130 semester hours
}


## Composition-Theory Major

Required:Music Theory/Applied Music: ..... 20 hours
Composition Class: 580:030 (2 hrs.);
Music and Technology: 580:122 (2 hrs.)
Applied Composition: 540:054 (4 hrs.); 540:154
( 12 hrs. )
Music, Organizations and Ensembles (530:xox)
(including 2 hours of West African Drumming530:012:208 hours
Applied Music: Applied Piano 540:060 (beyond 540:P46).. 2 hoursMusic Techniques: $560: 017$ or $560: 018$; $560: 021$ or
560;022; 560:052/560:152. ..... 6 hours
Music Theory: 580:011; 580:012; 580:013; 580:014; 580:015; 580:016; 580:017; 580:018; 580:025; 580:026; 580:027; 580:028; 580:110; 580:120; 580:121; 580:126. ..... 27 hours
Music History and Musicology: 590:005; 590:010; 590:011; 590:1 xx or 595:1x. ..... 11 hours
Electives in music: ( 100 -level) ..... 8 hours
82 hours

Additional requirements:

1. Senior Project: In the last semester before graduation, the student must have completed a large work for orchestra or wind symphony (or some other option with the consent of the composition faculty). The work will be given a reading, the date of which is to be determined by the director of the ensemble. The director shall also dictate the date of delivery for the score and parts. The student will prepare the score and parts using an industry standard computer notation/ printing program such as Finale or Nightingale.
2. Majors are expected to present regular performances of their pieces on the Student Composers Concert series (minimum of six performances).
3. Majors must have a grade of $B$ or better in Analysis $580: 110$ before they can take $18^{\text {th }}$ Century Counterpoint 580:121.
Note: Musical Acoustics 880:142 may be substituted for a 100-level music elective. Prerequisites for 580:122 include Theory/AT/SS II (580:012, 580:016, 580:026).

## Music Education Major

## (Extended Program)

The Music Education major requires a minimum of 136 total hours for Specialization A, a minimum of 137 total hours for Specialization B, and a minimum of 147 total hours for Specialization C to graduate.

## Required:

Music, Organizations and Ensembles (530:xox)................... 7 hours
Applied Music (540:xoa) see specializations below
Music Education and Methods: 570:050; 570:141 ... 5 hours
Music Theory: 580:01 1; 580:012; 580:013; 580:014;
580:015; 580:016; 580:017; 580:018; 580:025;
580:026; 580:027; 580:028; 580:110
18 hours
Music History and Musicology: 590:005; 590:010; 590:011

8 hours
CORE TOTAL (Applicable to all specializations below) ... 38 hours
Specialization A below ..... 28 hours
MAIOR TOTAL ..... 66 hours
Specialization $B$ below 29 hours
MAJOR TOTAL 67 hours
Specialization C below 39 hours
MAJOR TOTAL ..... 77 hours
Specializations (choose A, B, or C below)- Specialization A (Choral/General: K-6, 7-12)
Applied Music: (540:xxx) including at least 4 hours of 100 -level work in major area ..... 12 hours
Applied Music: Applied Piano 540:060 (taken beyond 540:P46) 2 hours
Music Techniques: 560:018; 560:022; 560:030; 560:031 ..... 7 hours
Music Education and Methods: 570:015; 570:130; 570:165.. ..... 7 hours28 hours
Specialization B (Instrumental: K-6, 7-12)
Applied Music ( $540:$ :oxx) including at least 4 hours of 100-level work in major area 14 hours
Music Techniques: 560:017; 560:021 5 hours
Music Education and Methods: 570:010 ( 6 hrs., includingone course each from brass, percussion, strings, andwoodwinds); 570:161; 570:162; 570:163; 570:164 .... 10 hours29 hours
Specialization C (Jazz: K-6, 7-12)
Applied Music ( $540: x x x$ ) including at least 4 hours of 100-level work in major area 14 hours
Music Techniques: 560:017; 560:021; 560:052/560:152 ..... 8 hours
Music Education and Methods: 570:010; 570:161; 570:162; 570:163; 570:164 10 hours
Music Theory: 580:127; 580;128 ..... 4 hours
Music History and Musicology: 590:160 ..... 3 hours
39 hours

Note: Music Education majors will meet the requirements of $250: 150$, Classroom Evaluation Instruments (Professional Education Requirements), by completing 570:141 (all majors), and 570:161, 570:162, 570:163, and 570:164 (instrumental and jazz majors); or 570:165 (Choral/General majors). They will meet the requirements of $240: 020$ Educational Media by completing 570:050, Introduction to Music Education. These options remain valid only for those students who complete their undergraduate degrees in music education.

## Additional Major Requirements:

1. For all specializations: degree recital (half recital).
2. For specialization C (Jazz): two (2) semesters of jazz combo are required in addition to the large ensemble requirement ( 7 hours) of orchestra, chorus or band.
3. For all specializations: students must have a minimum grade of $\mathbf{C}$ in all music subjects in order to qualify for student teaching.
4. Large ensemble requirements for guitar majors can be fulfilled by participation in either Jazz I, II, III, or IV, or a jazz combo.
5. Guitar majors may not pursue the Music Education with Jazz specialization degree.

## Performance Major

Required:Music, Organizations and Ensembles (530xacx)8 hours
Applied Music (540:xax) including at least 12 hours of 100-level work in the major area ..... 22 hourd
Music Techniques: 560:017 or $560: 018$; 560:021 or 560:022; 560:130 7 hour
Music Pedagogy: 570:130 (vocal majors) or 570:138
(instrumental majors) or 570:148 (keyboard majors) .. 2 hours
Music Theory: 580:011; 580:012; 580:013; 580:014;
580:015; 580:016; 580:017; 580:018; 580:025;580:026; 580:027; 580:028; 580:110; 580:1xx ............. 21 hours
Music History and Musicology/Performance Literature and Repertory: 590:005; 590:010; 590:011; 595:120; 590:1xx and/or 595:1 xx 13 hours
Electives: 540:xxx (maximum of 4 hrs.); 560:xax; 570:xxx; 580:xxx; 590:xxx; 595:xxx only 7 hours

## Additional Requirements:

1. Junior recital (half recital).
2. Senior recital (full recital).
3. Voice majors will elect $560: 030$ and $560: 031$; are required to com-1 plete one semester ( 5 credits-UNI) at the college/university level in each of two of the following foreign languages listed in order of preference: Italian, German, French; and are strongly recommended to take Performance Literature for Voice II, 595:120.
Note: Performance majors who desire teaching licensure can comple the music methods requirements under the Music Education majc (pages 115-116) and the Professional Education Requirements (page 46), Musical Acoustics, 880:142, may be substituted for a music elective.

# Philosophy and Religion 

## (College of Humanities and Fine Arts)

## www.uni.edu/philrel

B. DeBerg, Head. K. Atkinson, E. Boedeker, H. Brod, S. Clayton, W. Clohs esy, F. Degnin, S. Hill, M. Holland, D. Morgan, M. Reineke, J. Robinsons J. Soneson, D. Wood.

## Bachelor of Arts Degree Programs

-120 semester hours

## Philosophy Major

Required:

Philosophy: 650:045; 650:142; 650:150............................... 9 hours
At least three of the following: $650: 100 ; 650: 101$; 650:103; 650:104 $9-12$ hours
Electives from the following: 650:021; 650:105; 640/650:113;
$650: 119 ; 650: 143 ; 640 / 650: 152 ; 650: 153 ; 650: 172$; 640/650:250 9-12 hours
Additional electives in philosophy ...o.aco..co.............................oer. 6 hours
36 hours

## Major in the Study of Religion

Required: at least 6 hours from each of the following categories:
Textual and Analytic Studies of Religion: 640:030; 640:1 10; 640/650:113; 640:126; 640:141; 640:142; 640:154 6 hours
Historical and Cultural Studies of Religion: 640:130; 640:132; 640:134; 640:136 $\qquad$ 6 hours
Social and Ethical Studies in Religion: 640:115; 640:138; 640/650:152; 640:162; 640:165; 640:168; 640:171 $\qquad$ 6 hours Electives in religion (not more than two from 640/650:173; 640/650:174; 640/650:175; 640/650:197; 640/650:250)...... 18 hours 36 hours

## Pre-Theological Emphasis

Students preparing for ministry or for graduate professional education in theology at a seminary or divinity school, regardless of major, are advised to consult with the pre-theological advisor, who will help them to know the requirements of individual schools and to plan an undergraduate program appropriately designed for their professional interests.

## Philosophy/Religion/Business: Combined Five-Year B.A./M.B.A. Program

The UNI College of Business Administration and the Department of Philosophy and Religion jointly offer a five-year program in two combinations leading to a Bachelor of Arts degree (B.A.) and a Master of Business Administration degree (M.B.A.). They are Philosophy B.A./M.B.A. and Religion B.A./M.B.A. This five-year program is ideal for students who want a sound foundation in the liberal arts and an education in business leadership. Students should declare their intention to enroll in this program no later than the middle of their sophomore year.

## Ethics Minor

The Ethics minor is intended to provide students of diverse major fields of study a way to focus and develop their interest in ethics both by offering them a core of courses essential to an understanding of the field of ethics and by advising them in the selection of courses that enable them to develop depth and detail in theoretical, professional and applied ethics.

Required:
Religion: 640:171 ................................................................................. 3 hours
Philosophy: 650:142 ............................................................ 3 hours
one of the following
Religion: 640:024; 640:040.
Philosophy: 650:021; 650:050.
one of the following. 3 hours
Philosophy or Religion: 640/650:173; 640/650:174; 640/650:175.
Philosophy: 650:245.
Electives: At least one of the following.onooneno............................. 3 hours
15 hours
List of electives:
Management: 150:100.
Finance: 160:162.
Teaching: 280:070.
Psychology: 400:160.
Communication: 48C:128.
Religion: 640:115.
Philosophy: 650:105; 650:172.

Philosophy or Religion: 640/650:152; 640/650:194; 640/650:197. Humanities: 680:130.
History: 960:122; 960:142; 960:146; 960:161.
Sociology: 980:148.

## Philosophy Minor

Required:
Philosophy: 650:021.............................................................. 3 hours
Two courses in history of philosophy series .......................... 6 hours
Electives in philosophy ,............................................................. 12 hours 21 hours

## Religion Minor

Required:
Religion: 640:024; 640:141 or 640:142 ................................. 6 hours
Electives in religion ..o.o.o....................o......................................... 15 hours
21 hours

## Program Certificates

The Youth Development in Religious Settings Certificate interdisciplinary program is jointly offered by the Department of Philosophy and Religion and the Division of Leisure, Youth and Human Services within the School of Health, Physical Education and Leisure Services. For information on the following program certificate, see page 132 or interested students should contact the Department of Philosophy and Religion or the Division of Leisure, Youth and Human Services.

## Youth Development in Religious Settings Certificate

## Physics

## (College of Natural Sciences)

## www.physics.uni.edu

C. Chancey, Head. F. Behroozi, D. Berman, K. Couch Breitbach, J. Deisz, L. Escalada, D. Olson, A. Pascarella, M. Roth, P. Shand.

The Department of Physics offers major programs in two baccalaureate areas: the Bachelor of Science and the Bachelor of Arts. The B.S. Physics major is recommended for students who wish to prepare for graduate study in physics, engineering, or other sciences such as geophysics, astronomy, biophysics, or medical physics.

The B.S. Applied Physics major is especially suitable for students seeking industrial or other applied employment after the B.S. degree. It could also serve as a background for graduate study in some applied science or engineering areas.

The B.A. Physics major is for students (including double majors) desiring a broad background in science or who are taking a substantial amount of work in other areas. With appropriate choice of electives the B.A. Physics major meets the needs of pre-medical and pre-law students and students planning careers in science-related administration, business, or technical writing.

The B.A. Physics Major Teaching is for students preparing to be physics teachers at the secondary school level.

# Bachelor of Science Degree Programs 

- 126 semester hours


#### Abstract

Note: To graduate with a B.S. degree in Physics or Applied Physics, a student must earn an overall grade point average of at least 2.50 in all courses applied toward the major.


## Applied Physics Major

## Required:

Mathematics $800: 060 ; 800: 061 ; 800: 062 ; 800: 076 ; 800: 149 . .18$ hours
Computer Science: 810:036....o.o............................................ 3 hours
Chemistry: 860:044 and 860:048, or 860:070 .................... 5-8 hours
Physics: 880:130; 880:131; 880:132; 880:137; 880:138;
66-69 hours

## Option 1: Applied Physics

## Required:

> Physics: 880:140 or 880:141; 880:145; 880:150; 880:152; 880:154; 880:179 (2 hrs.) or 880:184 (2 hrs.)............ 19 hours

## Electives in physics: 100-level (may include 870:130). <br> 3 hours

OPTION 1 TOTAL
22 hours

## Option 2: B.S. Applied Physics/Engineering Dual-Degree Major

Qualified students may pursue a dual-degree major leading to a B.S. Applied Physics degree from the University of Northern Iowa (UNI) and a B.S. engineering degree from Iowa State University (ISU) or the University of Iowa (UI). This requires approximately three years of attendance at UNI followed by approximately two years of attendance at ISU or UI. Students who successfully complete the UNI part of the major are guaranteed admittance into the ISU or UI portion of the major if they have: an average of at least $B(3.00 \mathrm{GPA})$ in all course work; an average of at least $\mathrm{B}(3.00 \mathrm{GPA})$ in the chemistry, mathematics, and physics courses required by the UNI Department of Physics; and the positive recommendation of the Head, Department of Physics.

The engineering courses completed toward a B.S. engineering degree at ISU or UI will be transferred to UNI to provide 6-9 credit hours of electives for the applied physics portion of the major. The UNI internship requirement will be satisfied through comparable practical experience at ISU or UI that has been approved by the Head, Department of Physics, UNI.

In the first three years at UNI students in the major must complete at least 90 semester credit hours of course work. In addition to the courses listed above, the students are expected to complete courses to satisfy the Liberal Arts Core requirements. Credit, but no grades, for courses at UNI passed with a grade of C or better will be transferred to ISU or UI as credit for equivalent courses there, even though they may not be required by the engineering curriculum selected by the student.

During the years at ISU or UI, students will complete the requirements specified in the College of Engineering Catalog at the time of their admission. Course work completed at ISU or UI will be transferred to UNI to complete the requirements for the applied physics portion of the major. Upon successful completion of the major, students will be eligible to participate in commencement ceremonies at both UNI and either ISU or UI.

## Required:

Physics:

Two of the following: 880:136; 880:150; 880:166; 880:167; 880:172. and two of the following: 880:140 or 880:141; 880:145; 880:152; 880:174.
Physies electives: 6-9 hourn
(Course work must be completed at ISU or U1 that satisfies the UNI requirements of 6-9 credit hours of electives in Applied Physics. The UNI internship requirement will generally be satisfied through comparable practical experience at ISU or UI that has been approved by the Head, Department of Physics, UNI.)
OPTION 2 TOTAL

$$
22 \text { hours }
$$

## Physics Major

Required:

Mathematics: 800:060; 800:061; 800:062; 800:076; 800:149.. 18 hours

Chemistry: 860:044 and 860:048, or 860:070
5-8 hours

Computer Science: 810:036.................................................. 3 houru

Physics: 880:130; 880:131; 880:132; 880:136; 880:137;

880:138; 880:150; 880:166; 880:167; 880:172;

880:180 (2 hrs.); 880:187.

39 hourd

## Electives:

Physics: 100-level (may include 870:130)
3 hours

68-71 hours

## Bachelor of Arts Degree Progranis

- 120 semester hours (Liberal Arts)
- 130 semester hours (Teaching)


## Physics Major

Required:
Mathematics: 800:060, 800:061 .............................................. 8 hours
Physics: 880:130; 880:131; 880:132; 880:137; 880:138........ 17 houm
Electives:
Mathematics or Computer Science .................................. 3-4 hours
One of the following: 800:062, 800:076, or 810:061.
Physics: 100 -level 11 hourt

Elective courses must be ones that count toward a major in the department in which the course is offered or courses numbered $830: x<x$.

53-54 hours

## Physics Major-Teaching

Required:
Mathematics: 800:060, 800:061 ........o.o............................... 8 hourn
Science and Science Education: 820:190; 820:193; 820:196 ... 8 hours
Physics: 880:130; 880:131; 880:132; 880:137; 880:138........ 17 hour Electives:

Physics: (all 100-level courses)............................................. 7 hours
Non-physics science courses from the College of Natural
Sciences (excluding all 820:xxx and mathematics below
800:060)
6 hours
46 hour
Sufficient work including current curricula should be taken for li-


#### Abstract

censure approval in a second area. Common teaching combinations are physics-chemistry or physics-mathematics.

Completion of this major will satisfy the requirements of the Iowa Department of Education for licensure.


## Physics Minor

Required:<br>Physics: 880:130; 880:131 ..................................................... 8 hours<br>Electives in Physics: 100-level courses.<br>8 hours<br>16 hours

## Physics Minor-Teaching

Required:
Science and Science Education: 820:190; 820:193; 820:196... 8 hours
Physics: 880:054 or $880: 130 ; 880: 056$ or $880: 131$. $\qquad$ 8 hours
Electives in Physics: 100-level courses (including no more than 4 hours from 880:152 and 880:154)

14 hours 30 hours

## Political Science

## (College of Social and Behavioral Sciences) <br> http://fp.uni.edu/polisci <br> P. Mauceri, Acting Head. P. Agbese, K. Basom, M. Berner, A. Brierly, M. Hall, R. Hays, D. Hoffman, A. Kogh M. Licari, S. Lobelh, C. Peters, D. Vajpeyi, T. Yu. <br> Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)


## Political Communication Major

## Required core:

Communication: 48C:160; 48C:180 or 48C:183 or 48C:189.. 6 hours
Journalism: 48):002 ............................................................... 3 hours
Political Science: 940:111; 942:150........................................ 6 hours



Communication: 48C:197 or
Political Science: 940:181.
Emphases (select two areas of focus with 5-6 hours from each area)

11-12 hours 36-37 hours
Focus Area 1: State and Local Public Affairs (6 hours)
Political Science: 942:048; 942:131; 942:132.
Focus Area 2: Political Campaigns and Elections (6 hours)
Political Science: 942:112; 942:134; 942:151.
Focus Area 3: International Affairs (6 hours)
Political Science: 943:125; 943:143; 943:145.
Geography: 970:116.
Focus Area 4: International Communication (6 hours)
Communication: 48C:151.
Journalism: 48J:151.
Public Relations: 48P:170.
Focus Area 5: Decision-Making (5-6 hours)
Communication: 48C:128; 48C:148; 48C:178.

## Focus Area 6: Political Discourse ( 6 hours)

Communication: 48C:113; 48C:123; 48C:172; 48C:174.
Sociology: 980:138.
Focus Area 7: Media Analysis (6 hours)
Electronic Media: 48E:021; 48E:131; 48E:139; 48E:141; 48E:161.

## Political Science Major-Liberal Arts

## Required:

Political Science: 940:010; 942:014; 943:024; 944:040........ 12 hours
Students must take at least one upper-level course in each of the four sub-fields of political science: Political Theory: 941:1xx 3 hours
American Politics: 942:1xx.
3 hours
International Relations: 943:1xa
3 hours
Comparative Politics: 944:1 xx
3 hours
Electives in political science. ..... 15 hours
*Not more than 9 semester hours of political science taken within the
International Affairs minor may also be counted for credit on this major.

## Political Science Major-Teaching

## (Extended Program)

The Political Science Major in Teaching requires a minimum of 135141 total hours to graduate.

## Required:

Social Science: 900:190; 900:191 ........................................... 4 hours

Political Science: 940:010; 942:014; 942:131 or 942:132;
942:134 or 942:151; 943:024; 944:040
18 hours
One of the following: 941:156; 941:160; 941:161 .................. 3 hours

37 hours*
A teaching minor is required in one of the social sciences.
*Not more than 9 semester hours of political science taken within the International Affairs minor may also be counted for credit on a political science major or minor (teaching or non-teaching).

## Public Administration Major

A student declaring a major in Public Administration will be required to have sophomore standing and a minimum GPA of 2.50 for all courses whether taken at UNI or transferred from other institutions. To graduate with a major in Public Administration a student must have a cumulative GPA of 2.50 in course work taken at UNI in the Public Administration major.

Required:
Political Science: 940:010; 940:11; 942:014; 942:048; 942:153*; 942:172*; 942:173*; 942:174*; 942:175*; 942:188* 30 hours

Area of concentration: choose one of the following focus areas. 2 hours 43-47 hours
Focus Area 1 - Economics and Finance (select 3 courses)
Accounting: 120:030; 120:031.
Economics: 920:053; 920:054; 920:117**; 920:125**; 920:148.
Political Science: 940:176.
Focus Area 2 - Community and Regional Development (select 3 courses)
Political Science: 940:176; 942:131; 942:132; 942:171***.
Geography: 970:104; 970:117; 970:164;970:168; 970:174.

Focus Area 3 - Human Resources (select 3 courses)
Management: 150:153; 150:165; 150:166.
Psychology: 400:157; 400:158.
Communication Studies: 48C:132.
Political Science: 940:176.
Sociology: 980:130 (cross listed as 450:163).
*942:014 and 942:048 are prerequisites for these courses.
**920:053 and 920:054 are prerequisites for this course. Both 920:053 and 920:054 may substitute for $920: 024$ which will satisfy Category 5B of the Liberal Arts Core.
***942:014 and 942:132 are prerequisites for this course.

## International Affairs Minor-Liberal Arts

The International Affairs minor is composed of 21 hours in political science and related disciplines. The requirements are as follows:

## Required:


At least two of the following . 6 hours
Economics***: 920:136.
Political Science: 941:122; 943:118; 943:119; 943:125;
943:127; 943:143; 943:145; 944:121; 944:123.

Political Science: 944:135; 944:162; 944:164; 944:165; 944:167.
Two of the following*: any additional electives of the

OR
Communication: 48C:151.
Journalism: 48J:151.
French: 720:124; 720:125.
German: 740:123; 740:150.
Russian: 770:141; 770:142.
Spanish: 780:120; 780:123; 780:152.
Portuguese: 790:123.
Environmental Science: 830:130.
Economics***: 920:137; 920:143; 920:175.
History: 960:154; 960:157; 960:160; 960:169; 960:170;
960:172; $960: 174 ; 960: 175 ; 960: 177 ; 960: 178 ;$ 960:180; 960:182; 960:187.
Geography: 970:114; 970:116; 970:141.
Sociology: 980:177 or 990:177.
Anthropology: 990:162. 21 hours** *This requirement may also be met by an internship approved by the Department of Political Science. Furthermore, students who have successfully completed four semesters at the college level of any foreign language, with at least a 2.00 GPA , or demonstrate an equivalent competency level can apply three credit hours toward the fulfillment of this requirement. ${ }^{* *}$ No more than 9 hours of political science for this minor can also be counted toward a teaching or non-teaching major in political science. ***920:053 and 920:054 are prerequisites to all 100-level economics courses. Either 920:024 or both 920:053 and 920:054 will satisfy Category 5B of the Liberal Arts Core.

# Political Science Minor-Liberal Arts 

Required:
Political Science: 940:010; 942:014; 943:024; 944:040 ........ 12 hours
One of the following: 941:156; 941:160; 941:161................. 3 hours

18 hours,
*Not more than 9 semester hours of political science taken within the International Affairs minor may also be counted for credit on a politiod science major or minor (teaching or non-teaching).

## Political Science Minor-Teaching

Required:
Social Science: 900:190; 900:191 ........................................... 4 hours
Political Science: 942:014; 942:131 or 942:132; 942:134 or 942:151; 943:024; 944:040......................................... 15 hour
One of the following: 941:156; 941:160; 941:161................. 3 hours

28 hourct
*Not more than 9 semester hours of political science taken within the International Affairs minor may also be counted for credit on a political science major or minor (teaching or non-teaching).

## Politics and Law Minor

The Politics and Law minor is intended to provide students with a general understanding of American legal institutions and how these institutions interact and influence our policy. The program equips studendil with a facility in legal reasoning and logic.

## Required:

Philosophy: 650:045 .................................................................. 3 hourd
Political Science: 942:014; 942:141; 942:146.......................... 9 hour

Political Science: 942:144; 942:147
Sociology: 980:022; 980:162
One of the following.
3 houre
Philosophy: 650:172
Political Science: 941:129; 942:136; 942:142; 943:143
Sociology: 980:070; 980:128; 980:131; 980:132
21 hours
Not more than 9 semester hours of political science for this minow can count toward a teaching or non-teaching major in political science,

## Psychology

## (College of Social and Behavioral Sciences)

## www.uni.edu/psych

F. Barrios, Head. S. Brown, A. Butler, M. DeSoto, L. Diemer, M. Gasser, A. Gilpin, M. Gonnerman, H. Harton, C. Hildebrandt, R. Hitlan, B. Koppen, M. Losch, M. MacLin, O. MacLin, A. Osman, J. Somervilh, J. Susskind, RÁ Tan, J. Wallace, L. Walsh, J. Williams, J. Yates.

Students who want to declare psychology as a major or minoty including the teaching programs, must have completed 9 hours of psychology ( $400: x a x$ ) with a minimum GPA of 2.50 . Students not meetin this requirement may discuss their special situation with the departme head who may waive the requirement in extraordinary circumstances, 4 transfer students must have permission of the department head in order to declare a major or minor.

Only courses with an earned grade of at least a C- will count toward the majors and minors.

It is possible for psychology majors to graduate with departmental honors provided they have an overall GPA of at least 3.50 and complete a research project deemed worthy of honors by the department. Generally such a project is done in the context of 3 hours of $400: 193$, Research Experience in Pychology.

Introduction to Psychology (400:001) is a prerequisite for all other psychology courses, and therefore must be taken by all majors and minors. It also counts as a Liberal Arts Core requirement.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)


## Psychology Major

Required:
Psychology: 400:001; 400:101; 400:102; 400:118................ 14 hours
Basic processes electives -6 hours from the following: 400:106; 400:127; 400:134; 400:149; 400:150; 400:151; 400:152; 400:153; 400:155 .............................................. 6 hours
Advanced electives -9 hours from the following: 400:125; 400:142; 400:154; 400:157; 400:158; $400: 162 ; 400: 163 ; 400: 166 ; 400: 167 ; 400: 170$; 400:173; 400:177; 400:189 ( 3 hrs. maximum); 400:192 ( $3 \mathrm{hrs}$. maximum); 400:193 (3 hrs. maximum); 400:198 (3 hrs. maximum)......................... 9 hours
Electives in psychology ............................................................. 2 hours
38 hours

## Psychology Major-Teaching

## (Extended Program)

The Psychology Teaching major requires a minimum of 143-152 total hours to graduate.

Required:
Psychology: 400:001; 400:101; 400:102; 400:118 14 hours
Basic processes electives - 6 hours from the following: 400:106; 400:127; 400:134; 400:149; 400:150; 400:151; 400:152; 400:153; 400:155. 6 hours
Advanced electives -9 hours from the following:
400:125; 400:142; 400:154; 400:157; 400:158; 400:162;
400:163; 400:166; 400:167; 400:170; 400:173; 400:177;
400:189 ( 3 hrs . maximum); 400:192
( 3 hrs . maximum); 400:193 ( 3 hrs . maximum);
400:198 (3 hrs. maximum) .......................................... 9 hours
Electives in psychology ..................................................................... 9 hours

42 hours
Students electing the teaching major must minor in one of the academic areas usually taught in secondary schools in order to assure student teaching placement and increase the chances of employment. Particularly recommended for a minor are history, English, mathematics, some modern languages, and the natural sciences.

## Psychology Minor

Required:

Electives in psychology ........................................................................ 15 hours
25 hours

## Psychology Minor-Teaching

Required:<br>Psychology: 400:001; 400:101; 400:102; 400:118 ................ 14 hours<br>Electives in psychology - 6 hours from the following: $400: 106 ; 400: 127 ; 400: 149 ; 400: 151 ; 400: 152 ; 400: 153 ;$ 400:155; 400:162; 400:163<br>6 hours<br>Additional electives in psychology (any category; see psychology major). 6 hours<br>Social Science: 900:190 (unless already taken in major); 900:191 .. 4 hours<br>30 hours

## Science and Science Education

## www.cns.uni.edu/Overview/Departments.html*SCIENCEED

There is no science department as such. The science majors and the general courses in science are offered under the jurisdiction and general supervision of the Dean of the College of Natural Sciences. The responsibility for programs and courses in science education is delegated to the science education faculty under its chairperson. Members of the science education faculty hold their primary appointments in the various science departments in the College of Natural Sciences.

## Bachelor of Arts Degree Programs

## All Science Teaching

## (Extended Program)

This major is intended for students who wish to teach at the secondary level in all areas of science (biology, chemistry, earth science, and physics). The program will lead to lowa Department of Education endorsement in biology, chemistry, earth science, physics, physical sciences, and general science. The All Science Teaching major requires a minimum of 144 total hours to graduate. Because of the number of courses required for this major and course sequencing, it cannot be completed in eight semesters of normal work. It will require a longer time or additional work during summers.


Science and Science Education: 820:190; 820:193; 820:196... 8 hours
Biology: 840:051; 840:052; 840:193 ..................................... 11 hours
Chemistry: 860:044; 860:048* .............................................. 8 hours
Earth Science: 870:031; 870:035 ........................................... 8 hours
Physics: 880:054; 880:056 .............................o.o....................... 8 hours
Biology: 840:130; 840:140; 840:168; 840:169..................... $7-8$ hours

Earth Science: 870:010; 870:021; 870:022 ......................... 7-8 hours

Physics (any 100-level)
2-8 hours
73 hours
For completion of this major the grade point average in each of the four science disciplines must be a minimum of 2.00 , with a 2.50 GPA in the major as a whole.

Elective courses must be ones that count toward the major in the discipline or be approved for this use by the department offering the course.
*Students with excellent preparation in chemistry may substitute 860:070 plus 3 hours of additional credit hours in chemistry electives for $860: 044$ and 860:048.
**870:010 must be taken for four semester hours of credit.

## Notes:

1. Students with sufficient high school preparation may be allowed to omit some introductory courses and substitute other courses from the same department.
2. The mathematics prerequisite for one or more of the above courses is a working knowledge of algebra and trigonometry or 800:046.

## Middle/Junior High School Science Teaching

This major is intended for students who wish to teach science at the junior high or middle school level. This major, if taken in conjunction with the Middle School major in the College of Education, will lead to Iowa Department of Education endorsement in All Science I Grades 5-8. As a stand-alone major, it fulfills $7-12$ General Science and Physical Science endorsements.

## Required:

Educational Psychology: 200:116........................................... 2 hours
Elementary, Early Childhood, and Middle Level Education: 210:122 3 hours
Science and Science Education: 820:190; 820:193; 820:196... 8 hours
Biology: 840:051; 840:052; 840:193 ..... 11 hours
Chemistry: 860:044; 860:048*
8 hours
Earth Science: 870:010**; 870:021; 870:022; 870:031 ..... 12 hours
Physics: 880:054; 880:056 ..... 8 hours
Electives in science: from biology, chemistry, physics and earth science which must include 6 hours at the 100 -level or above. 7 hours
59 hours

For completion of this major the grade point average in each of the four science disciplines must be a minimum of 2.00 , with a 2.50 GPA in the major as a whole.
*Students with excellent preparation in chemistry may substitute 860:070 plus 3 hours of additional credit hours in chemistry electives for 860:044 and 860:048.
**870:010 must be taken for four semester hours of credit.

## Notes:

1. Students with sufficient high school preparation may be allowed to omit some introductory courses and substitute other courses from the same department.
2. The mathematics prerequisite for one or more of the above courses is a working knowledge of algebra and trigonometry or 800:046.

## Basic Science Minor (K-6)-Teaching

For those pursuing K-6 general classroom teacher licensure with an endorsément in Basic Science (K-6).

## Required:

Science and Science Education: 820:031; 820:032; 820:130; 820:181 14 hours
Biology: 840:181 .................................................................. 4 hours
Earth Science: 870:181 .......................................................... 4 hours
Electives:
Chemistry or Physics (select one): 860:010 (4 hrs.); 860:061; 880:011 ........................................................... 4 hours
Earth Science (select one): 870:010; 870:021; 870:031....... $\frac{3}{2}$ hours

$$
29 \text { hours }
$$

## Social Science

## http://fp.uni.edu/csbs

There is no social science department as such. The programs and the general courses in social science are offered under the jurisdiction of the Social Science Education Committee and the general supervision of the Dean of the College of Social and Behavioral Sciences. Inquiries should be directed to the Undergraduate Coordinator, Social Science Prograna College of Social and Behavioral Sciences.

## Bachelor of Arts Degree Program

## Social Science Major-Teaching Plan A - Specialist

## (Extended Program)

This major is intended for students who wish to teach three of the following social sciences: American Government, American History Anthropology, Economics, Geography, Psychology, Sociology, and World History. Because of the number of courses required for this major, it cannot be completed in eight semesters of normal work. It will require a longer time or additional work during summers.

The Social Science Teaching major requires a minimum of 135 total hours to graduate.

## Required:

Social Science: 900:190;900:191
4 hours
Three areas of study in the social sciences are required.
Two of these areas require a minimum of 21 hours, and one requires a minimum of 18 hours. Only one field of history (American or World) may be selected as one of the three areas of the major 60 hours 64 hours
Upon completing 100 credit hours of college course work the student must have permission from the Undergraduate Coordinator, Social Science Program, to continue the Social Science-Teaching major based on minimum GPA requirements for full admission to the College of Education. Students unable to meet minimum grade point requirements for full admission to the College of Education and student teaching must seek an alternative degree.

## American Government

Political Science: 942:014; plus 12 (or 15) hours in American Government and 3 hours in Comparative Government or International Relations.
Eligible American Government courses:
940:176; 941:129; 942:048; 942:112; 942:120; 942:131; 942:132;
942:134; 942:136; 942:141; 942:142; 942:146; 942:147; 942:150;
942:151; 942:153; 942:155; 942:166; 942:171; 942:172; 942:173; 942:174; 943:127; 944:149.
Eligible electives in Comparative Government or International Relations:
943:024; 943:125; 943:143; 943:145; 944:135; 944:149; 944:164; 944:165; 944:167.
COURSES THAT MAY BE USED TO MEET REQUIREMENTS IN EITHER OF THE ABOVE CATEGORIES, BUT NOT BOTH: 942:155; 943:127.

## American History

History: 960:014; 960:015; plus 12 (or 15) hours in American history from the following courses:
960:102; $960: 116 ; 960: 122 ; 960: 124 ; 960: 130 ; 960: 131 ; 960: 134$;
960:135; 960:136; 960:137; 960:139; 960:140; 960:141; 960:142;
$960: 143 ; 960: 144 ; 960: 145 ; 960: 146 ; 960: 147 ; 960: 150 ; 960: 166$; 960:177; 960:189.

## Anthropology

Anthropology: 990:010; 990:011; plus 12 (or 15) hours in anthropology.

## Economics

Economics: 920:053*; 920:054*; 920:103; 920:104; plus 6 (or 9) hours in economics except 920:020; 920:024; 920:070.
*Both 920:053 and 920:054 will substitute for 920:024 which will satisfy Category 5B of the Liberal Arts Core.

## Geography

Geography: 970:026; 970:040; 970:141 or 970:142; plus 9 (or 12) hours in geography from the following courses:
970:010; 970:028; 970:061; 970:100; 970:101; 970:104; 970:111; 970:114; 970:116; 970:117; 970:119; 970:127; 970:137; 970:141 (for different region than above); 970:144; 970:151; 970:164; 970:171.

## Psychology

Psychology: 400:001; 400:118; plus 12 (or 15 ) hours in psychology.

## Sociology

Sociology: 980:001; plus 15 (or 18 ) hours of sociology from the following courses:
980:060; 980:080; 980:105; 980:108; 980:111; 980:121; 980:123; 980:125; 980:127; 980:130; 980:135; 980:138; 980:148; 980:156; 980:160; 980:162; 980:165; 980:167; 980:168; 980:169; 980:170; 980:171; 980:172; 980:176; 980:177.

## World History

History: one course from Category A (960:101, 960:103, 960:123, 960:151,960:152, 960:153, $960: 158,960: 164,960: 171,960: 173)$ and one course from Category B (960:126, 960:154, 960:155, $960: 156,960: 157,960: 160,960: 161,960: 162,960: 165,960: 169$, $960: 170,960: 172,960: 174$ ). Plus 12 (or 15) hours in European, Asian, Latin American and/or African history from the following courses: 960:101; 960:103; 960:104; 960:123; 960:126;960:151;

960:152; 960:153; 960:154; 960:155; 960:156; 960:157; 960:158; 960:160; $960: 161 ; 960: 162 ; 960: 163 ; 960: 164 ; 960: 165 ; 960: 169$; 960:170; $960: 171 ; 960: 172 ; 960: 173 ; 960: 174 ; 960: 175 ; 960: 176$; 960:178; 960:180; 960:181; 960:182; 960:183; 960:187; 960:189; 960:192.

## Social Science Major-Teaching Plan B - All Social Science

## (Extended Program)

This major is intended for students who wish to teach in the State of Iowa in all areas of social science: American Government, American History, Economics, Geography, Psychology, Sociology, and World History. Area of study will count for one endorsement area. Because of the number of courses required for this major, it cannot be completed in eight semesters of normal work. It will require a longer time or additional work during summers.

The Social Science Teaching major requires a minimum of 132-141 total hours to graduate.

## Required:

Social Science: 900:190; 900:191 4 hours
One area of study in the social sciences is required. That one area requires a minimum of 15 hours. The rest of the major would complete the Iowa All-Social Studies Endorsement which is as follows: American Government ( 9 hours), American History ( 9 hours), World History ( 9 hours), Economics ( 6 hours), Geography (6 hours) Psychology (6 hours), Sociology ( 6 hours) . 57-60 hours 61-64 hours
Upon completing 100 credit hours of college course work the student must have permission from the Undergraduate Coordinator, Social Science Program, to continue the Social Science-Teaching major based on minimum GPA requirements for full admission to the College of Education. Students unable to meet minimum grade point requirements for full admission to the College of Education and student teaching must seek an alternative degree.

## American Government

Political Science: 942:014; plus 6 (or 12) hours in American Government. Eligible American Government courses: 940:176; 941:129; 942:048;

942:112; 942:120; 942:131; 942:132; 942:134; 942:136; 942:141;
942:142; 942:146; 942:147; 942:150; 942:151; 942:153; 942:155;
942:166; 942:171; 942:175; 942:172; 942:173; 942:174; 942:188.

## American History

History: 960:014; 960:015; plus 3 (or 9) hours in American history from the following courses:
960:102; $960: 116 ; 960: 122 ; 960: 124 ; 960: 130 ; 960: 131 ; 960: 134 ;$
960:135; $960: 136 ; 960: 137 ; 960: 139 ; 960: 140 ; 960: 141 ; 960: 142$;
960:143; 960:144; 960:145; 960:146; 960:147; 960:150; 960:166; 960:177; 960:189.

## Economics

Economics: 920:053*; 920:054*; plus 0 (or 9 ) hours in economics except 920:020; 920:024; 920:070.
*Both 920:053 and 920:054 will substitute for 920:024 which will satisfy Category 5B of the Liberal Arts Core.

## Geography

Geography: 970:010 or 970:040; 970:061 or 970:141 or 970:142 or 970:171; plus 0 (or 9 ) hours within the Geography Department.

## Psychology

Psychology: 400:001; 400:1.18; plus 0 (or 9) hours in psychology.

## Sociology

Sociology: 980:001; 980:100 or 980:105 or 980:123 or 980:135 or 980:156; plus 0 (or 9 ) hours of sociology from the following courses: 980:060; 980:080; 980:105; 980:108; 980:111; 980:121; 980:123; 980:125; 980:127; 980:130; 980:135; 980:138; 980:148; 980:160; 980:162; 980:165; 980:167; 980:168; 980:169; 980:170; 980:171; 980:172; 980:176; 980:177.

## World History

History: one course from Category A (960:101, 960:103, 960:123, . $960: 151,960: 152,960: 153,960: 158,960: 164,960: 171,960: 173)$ and one course from Category B (960:126, 960:154, 960:155, 960:156, $960: 157,960: 160,960: 161,960: 162,960: 165,960: 169$, 960:170, 960:172, 960:174). Plus 3 (or 9) hours in European, Asian, Latin American and/or African history from the following courses: 960:101; 960:103; $960: 104 ; 960: 123 ; 960: 126$; $960: 151 ; 960: 152 ; 960: 153 ; 960: 154 ; 960: 155 ; 960: 156 ; 960: 157$; $960: 158 ; 960: 160 ; 960: 161 ; 960: 162 ; 960: 163 ; 960: 164 ; 960: 165$; 960:169; 960:170; 960:171; 960:172; 960:173; 960:174; 960:175; 960:176; 960:178; 960:180; $960: 181 ; 960: 182 ; 960: 183 ; 960: 187$; 960:189; 960:192.

## Social Work

## (College of Social and Behavioral Sciences)

## www.uni.edu/socialwork

T. Keefe, Head. F. Besthorn, M. Boes, T. Capshew, W. Downs, J. Hanson, C. Singleton Henkin, V. Hinanandani, L. Kaplan, J. McCullagh, L. Praglin, R. Schneider, K. van Wormer.

The Social Work Department at the University of Northern lowa is accredited by the Council on Social Work Education. The undergraduate social work major prepares students for beginning level professional social work practice.

## Bachelor of Arts Degree <br> Program

- 120 semester hours


## Social Work Major

## Required:

Design, Family and Consumer Sciences: 31F:055 or Psychology: 400:120. $\qquad$ 3 hours
Social Work: 450:041; 450:042; 450:091; 450:144; 450:163; 450:164; 450:184*; 450:185; 450:192; 450:193 or 450:195; 450:196. 41 hours
At least two of the following courses: 450:121; 450:142; 450:143; 450:171; 450:172; 450:173; 450:174; 450:175; 450:193**; 450:194***; 450:195** $\qquad$ 6 hours

Social Work: 450:080
OR
Sociology: 980:080**** 3 nover 53 hour
*450:184 can also be taken for 4 additional credit hours on an electis basis.
**Course may be taken for elective credit if not taken to fulfill core cour requirements.
***Course may be repeated once with a different topic.
****400:102 or $800: 072$ may be substituted.
A minimum cumulative grade point average for all college work of 2.40 and a 2.40 grade point average for all UNI courses taken is requir for admission to the Social Work major. A minimum UNI grade poin average of 2.40 is required for graduation as a Social Work major.

Prior to the initiation of the second Social Work Practice cour social work majors are required to complete a departmentally-appro 30 -contact-hour volunteer experience in a social service agency.

In order to enroll in 450:184, a student must be a Social Work majo and the following must be present: senior standing ( 90 or more cred ${ }^{3}$ ) hours); completion of 450:091 and 450:192 with a minimum grade of $C$ in each course; $450: 042 ; 450: 164 ; 450: 185$ and a statistics course; and a minimum UNI grade point average of $\mathbf{2 . 4 0}$.

Students who graduate with a major in Social Work receive a Bach elor of Arts degree with a Social Work Certificate.

## Program Certificates

For information on the following program certificates, see page 133 or contact the department office.

## Social Work Certificate <br> Substance Abuse Counseling Certificate

## Sociology, Anthropology and Criminology

## (College of Social and Behavioral Sciences)

## http://fp.uni.edu/sac

K. Crew, Head. S. Allbee, P. Baker, C. Bartollas, C. Dunn, R. Featherstoth R. Gorton, M. Grey, M. Leiber, J. Li, J. Lowell, G. Lutz, K. Mack, S. Muzzakli T. O'Brien, A. Podolefsky, K. Sandstrom, M. Shott, M. Stalp, J. Stockdale, A Woodrick, D. Wright.

## Bachelor of Arts Degree Programs

- 120 semester hours (Liberal Arts)


## Anthropology Major



## Anthropology Major-Teaching

## (Extended Program)

The Anthropology Teaching major requires a minimum of 130-135 total hours to graduate.
Required:
Social Science: 900:190; 900:191 ..... 4 hours
Sociology: 980:080 3 hours
Anthropology: 990:010; 990:011 ..... 6 hours
Electives in anthropology ..... 24 hours37 hoursA teaching minor is required, and it is strongly recommended thatthe minor be in another social science discipline.
Not more than 9 semester hours of credit from 990:145, 990:184, $990: 189$, and $990: 198$ may be applied toward this major.

## Criminology Major

Required:
Sociology: 980:001; 980:022; 980:025; 980:080 or 400:102* or $800: 072 ; 980: 108 ; 980: 175$ 18 hours
Six hours from the following (Group 1, Delinquency, Criminality and Deviance) 6 hours
Sociology: 980:112; 980:122; 980:123; 980:127; 980:151; 980:152; 980:153.
Six hours from the following (Group 2, Corrections and Treatment) 6 hours
Social Work: 450:171.
Sociology: 980:116; 980:117; 980:121; 980:126; 980:132.
Six hours from the following (Group 3, Law and Society).. 6 hours Political Science: 942:141; 942:142; 942:146; 942:147.
Sociology: 980:070; 980:119; 980:124; 980:128; 980:129; 980:131; 980:152; 980:162/990:162; 980:169/990:169; 980:181.
Three hours from the following (Group 4, Applied Studies) or three hours from Groups 1,2, and 3 $\qquad$ Sociology: 980:179; 980:184.
39 hours
*400:102 is 4-hour course.
Note: Students majoring in criminology should take 980:022 and 980:025 before taking any 100 -level courses within the major.

## Sociology Major

Required:
Sociology: 980:001; 980:080 or 800:072 or 400:102*; 980:108; 980:160 or 980:178; 980:170; and two of the following - 980:100; 980:123; 980:135; 980:171; 980:180 21 hours
Electives in sociology ..... 9 hours
Electives in anthropology ..... 3 hours
*400:102 is 4-hour course.
Not more than 9 semester hours of credit from 980:145, $980: 184$, 980:189, and $980: 198$ may be applied toward the major, except with the approval of your advisor and department head.

Not more than 18 semester hours of credit taken within the Criminology major may also be counted for credit on this major.

Not more than 9 semester hours of credit taken within the Criminology minor may also be counted for credit on this major.

## Sociology Major-Teaching

## (Extended Program)

The Sociology Teaching major requires a minimum of 130-135 total hours to graduate.

## Required:

Social Science: 900:190; 900:191 ............................................ 4 hours Sociology: 980:001; 980:060; 980:080; 980:108; 980:170.... 15 hours
Anthropology: 990:011 ......................................................... 3 hours
Electives in sociology (at least 9 hours must be 100-level courses).. 12 hours

## 34 hours

A teaching minor is required, and it is strongly recommended that the minor be in another social science discipline.

Not more than 9 semester hours of credit from 980:145, $980: 184$, 980:189, and 980:198 may be applied toward this major.

Not more than 18 semester hours of credit taken within the Criminology major may also be counted for credit on this major.

Not more than 6 semester hours of credit taken within the Criminology minor may also be counted for credit on this major.

## Anthropology Minor

Required:

Anthropology: 990:010; 990:011; 990:176; 990:177 ............ 12 hours

Electives in anthropology ....................................................................... hours

## 18 hours

## Anthropology Minor-Teaching

Required:
Social Science: 900:190 (unless already taken in major); 900:191
.4 hours
Anthropology: 990:010; 990:011 ............................................ 6 hours
Electives in anthropology ........................................................... 18 hours 28 hours

## Criminology Minor

## Required:

Sociology: 980:001; 980:022; 980:025; 980:175 .................. 12 hours
Electives: ( 9 hours from the following) ...................................... 9 hours
Sociology: 980:116; 980:119; 980:122; 980:123; 980:124;
980:127; 980:128; 980:129; 980:131; 980:132; 980:151; 980:153; 980:162/990:162;980:169/990:169;980:181 _

21 hours
Note: Not more than 6 semester hours of credit taken within the Sociology teaching major or Sociology minor may be counted for credit on this minot.

Not more than 9 semester hours of credit taken within the Sociology liberal arts or Anthropology majors may be counted for credit on this minor.

## Sociology Minor

Required:
$\qquad$
Electives in sociology ................................................................. 18 hours
21 hours
Not more than 9 semester hours of credit from 980:145, $980: 184$, 980:189, and 980:198 may also be counted for credit on this minor.

Not more than 9 semester hours of credit taken within the Criminology major may also be counted for credit on this minor.

Not more than 6 semester hours of credit taken within the Criminology minor may also be counted for credit on this minor.

## Sociology Minor-Teaching

## Required:

Social Science: 900:190 (unless already taken in major);
$\qquad$
Sociology: 980:001; 980;060 . 4 hours

Electives in sociology. 6 hours

28 hours
Not more than 9 semester hours of credit from 980:145, $980: 184$, 980:189, and 980:198 may also be counted for credit on this minor.

Not more than 9 semester hours of credit taken within the Criminology major may also be counted for credit on this minor.

Not more than 6 semester hours of credit taken within the Criminology minor may also be counted for credit on this minor.

## Program Certificates

For information on the following program certificates, refer to pages 133 and 134 or contact the department office.

Certificate in Criminology
Conflict Resolution Certificate
Skills in Social Research Certificate

## Special Education

(College of Education)

## www.uni.edu/coe/specialed

M. Agran, Interim Head. S. Alper, P. Crawford, S. Etscheidt, D. Gallagher, C. Hendrickson, S. Hong, C. Kliewer, F. Kohler, D. Raschke, P. Sitlington, A. Staples.

## Bachelor of Arts Degree Programs

- 130 semester hours (Teaching)


## Early Childhood Special Education Minor-Teaching

Required:
Special Education: 220:140; 220:141; 220:153 $\qquad$ 9 hours
Special Education: 220:192 (3 hrs., Practicum with Children with Disabilities in Least Restrictive Environment); 220:192 (1 hro, Practicum in Home Intervention) 4 hours 13 hours

## Severe Disability Minor-Teaching

This minor will lead to certification for teaching students with moderate, severe and profound disabilities from chronological ages 5-21 (Instructional Strategist II). Students must complete the requirements for Early Childhood, Elementary, Secondary Education major, and the severe disability minor endorsement area(s).

Required:
Special Education: 220:142 or 220:143; 220:153; 220:167; 220:183; 220:184; 220:187; 220:192

23 hours
Communicative Disorders: 51C:160. 2 hours
25 hours

## Special Education Minor-Teaching

This minor will lead to certification in teaching students with mild to moderate disabilities (Instructional Strategist I). Students must complete all requirements for an Early Childhood, Elementary, or Seconday major and complete student teaching in both the major and the specid education minor endorsement area.
Instructional Strategist I: Mild/Moderate K-6 Emphasis
Required:
Special Education core: 220:170; 220:174; 220:184; 220:192. .12 hours
Minor requirements:
Educational Psychology: 200:176. ..... 3 hours
Special Education: 220:142 (corequisite 220:192);
$\qquad$24 hours
Instructional Strategist I: Mild/Moderate 7-12 Emphasis
Required:Special Education core: 220:170; 220:174; 220:184;
Minor requirements:
Educational Psychology: 200:176 ..... 3 hours
Special Education: 220:143 (corequisite 220:192);
220:147; 220:151. ..... 12 hour
27 hours

## Teaching

## (College of Education)

www.uni.edu/coe/teaching
W. Callahan, Interim Head.

## Price Laboratory School

N. Davidson, Interim Director. M. Balong, A. Beckman, S. Blanco, S. Broma wich, K. Couch, L. Countryman, J. Cryer, G. Curtis, M. Doyle, A. DuChen L. Dykstra, M. Guenther, M. Hamilton, R. Hawbaker, B. Herrick, S. Hoffman, D. Kettner, R. Knivsland, J. Lemke, A. Lockhart, J. Maltas, S. McCuma ber, S. McGuire, J. McKowen, P. Meier, K. Miller, C. Nielsen, V. Oleson, J. Rohret, D. Smith, L. Smith, A. Spurr, J. Stichter, M. Stichter, J. Stone, C. Struck, A. Swann, M. Swanson, J. Tagtow, D. Tallakson, V. Truka, J. Uhienberg, R. Vanderwalh, B. Wagoner, L. Weber, M. Wilson, E. Zwanziger.

## Office of Student Field Experiences

T. Blaine, K. Blecha, D. Briggs, C. Canning, V. Cornett, R. Fehlman, L. Hoefu J. Kelly, K. Krueger, F. Miller, J. Montgomery, J. Noboa-Polanco, K. Oakland N. Pace, B. Riess, L. Rosulek, C. Schellhardt, M. Schroeder, D. Simmons, C. Timion.

The Department of Teaching is responsible for the administration of multi-faceted programs of Price Laboratory School (PLS) and the Office of Student Field Experiences (OSFE).

## Price Laboratory School

www.pls.uni.edu/
The Price Laboratory School conducts a program of instructiol for pupils enrolled in grades $\mathrm{N} / \mathrm{K}$ through 12 . The pupils primarily are residents of Cedar Falls and Waterloo and provide a rich, multi-culturd public school setting which enables the laboratory school to respond fully to its university responsibilities. The school offers a comprehensive prow gram of studies and activities. It is a member of the Area 267 Educatio(

Agency, and is accredited by the lowa Department of Education and the North Central Association of Colleges and Schools.

The laboratory school serves three major functions for the university and the State of Iowa:

1. As a teacher education laboratory, the school provides a variety of direct clinical and classroom experiences for students from all departments of the university as they prepare to enter the teaching profession. Members of the faculty supervise and direct these experiences and, in addition, teach university courses both on and off campus.
2. As a center for experimentation and research, the school is involved heavily in the writing of classroom instructional materials and the development of instructional methods and school curricula. Faculty members work together in project teams, frequently cooperating with colleagues across the university campus, at other Regents institutions, and with the Department of Education.
3. As an agent of leadership to Iowa elementary and secondary schools, the laboratory school regularly provides professional development activities for lowa educators including: sponsors conferences and workshops; participates in the activities of professional organizations; provides extension and consultant services; teaches off-campus extension courses; and cooperates with local and state agencies in faculty development and in-service activities.

## Student Field Experiences

## www.uni.edu/stdteach

The Office of Student Field Experiences administers the university's program in student teaching which is required of all undergraduates seeking a teaching degree. The student teaching program is administered through the office of the Head of the Department of Teaching and is under the supervision of the Director of Teacher Education and the jurisdiction of the Dean of the College of Education.

Completion of the present undergraduate teaching curriculum requires a minimum of twelve semester hours of credit in student teaching for all teacher education majors except for those who have earned credit in student teaching in another college or university. Student teaching credit earned in other colleges or universities does not completely fulfill the student teaching requirements of the University of Northern Iowa. Students who have completed three or more semester hours of credit in student teaching at another college or university in the same areas as their major at the University of Northern lowa will have their previous experience evaluated to determine how much additional student teaching is needed.

Teacher education majors seeking a dual endorsement (i.e.; special education/elementary, elementary/secondary, secondary/elementary) must complete a minimum of twelve semester hours of student teaching. The twelve hours of student teaching will be divided between the two levels in the student teaching assignment. Elementary majors with a minor in special education must complete one-half of their twelve-hour student teaching experience in a regular classroom and one-half of their twelve-hour experience in a special education setting. The special education student teaching assignment must be in a different category (i.e., mental disabilities or behavioral disabilities) from the 220:192 Experience in Special Education (see page 197). Student teaching is a twelve-semes-ter-hour offering.

Special area majors (i.e., art, ESL, music, and physical education) receive Kindergarten through 6 and 7-12 endorsements. They are required to complete twelve semester hours of student teaching in the special subject area. Special area majors must complete student teaching at both the elementary and secondary school levels.

The primary purpose of student teaching is to provide the student the opportunity to experience, in depth, the full role and meaning of teaching
in a real school setting. Specific emphasis is given to (1) the analysis of teaching and learning, (2) the pre-conditions of learning, (3) the organization of instructional content, (4) adapting methods and techniques to organization and content, (5) the logical process of teaching, and (6) principles of self-evaluation. This broad pattern of experiences, provided in either the campus laboratory school or off-campus affiliated schools, includes planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program.

A student teacher who withdraws from student teaching (280:1xx) prior to the mid-point of either the first or second assignment within the twelve-hour experience (if two placements) or before the mid-term of a single full semester assignment will receive a "W" (Withdrawn). A student teacher who withdraws from student teaching after the midpoint of the student teaching term will receive a No Credit grade.

The applicant for student teaching who previously received a No Credit grade in 280:1xx must be recommended for placement to the Council on Teacher Education (CTE) by the Director of Teacher Education following consultation with the coordinator who gave the No -Credit grade and the head of the major department(s). Approval by CTE is required for placement.

The scholarship average required before a student is permitted to register for student teaching is specified on page 47. A student must also have been fully admitted to the teacher-education program and must file an application for student teaching according to the time line published by the Office of Student Field Experiences. Students whose applications are received after the established deadline will not be guaranteed a placement in the semester for which they were a late applicant.

## Theatre

## (College of Humanities and Fine Arts)

## www.umi.edu/theatre

E. Lange, Acting Head. G. Berghammer, C. Colburn, L. Curtis, J. Edelnant, R. Glockner, C. Goatley, S. Nice, A. RohrBerg.

## Majors

1. Students may indicate their interest in majoring in theatre any time after their admission to UNI. Formal indication of interest shall be made via the Declaration of Curriculum form at which time the student will be considered a "pre-major" and will be assigned a "premajor advisor." (For freshmen, this shall be a freshman advisor.)
2. A student's freshman year shall be devoted primarily to course work in the Liberal Arts Core and Fundamentals of the Theatre Experience I and Stagecraft. Major course work shall be limited to courses as recommended by her/his freshman advisor and program policy.
3. The following criteria shall be used for determination of admission: a. $\quad \mathbf{2 . 5 0}$ cumulative GPA in at least 24 hours of course work (to include 48C:001, 490:010, and 620:005 or 620:015 or 620:034). b. 2.50 average GPA in the major.
c. Upon satisfaction of the admission requirements (a and b above), a student shall be converted to major status after the student files a Declaration of Curriculum which will then be processed and the student assigned a major advisor. The student shall be notified of her/his admission.
d. Students admitted to a major shall be able to continue course work toward their major.
e. Students unable to satisfy the admission requirements and consequently denied admission shall be notified in writing.
f. Students denied admission to a major shall not be allowed to pursue major course work except in cases where vacancies exist after all majors have registered. These students may use waiting lists as a means to seek access to courses. Students will be assigned interim advisors until admission requirements are mét.
g. Students must maintain a minimum cumulative GPA of 2.50 in order to be eligible to participate in productions or enroll in practicum coursework.
4. Transfer students entering UNI with an associate arts (A.A.) degree shall be admitted to a major status if their cumulative GPA is 2.50 or better and upon the condition, that the requirements of $48 \mathrm{C}: 001$ (Oral Communication), 620:005/620:015/620:034, and 490:010 (Fundamentals of the Theatre Experience) were satisfied at their junior/ community colleges.
5. Transfer students entering UNI without an A.A. degree shall be subject to the admissions standards requirements of students beginning their higher education studies at UN1, i.e. \#3.

## Minors

1. Admission to a Theatre minor requires a 2.50 cumulative GPA in at least 24 hours of course work (to include 48C:001, 490:010, and 620:005 or 620:015 or 620:034).

## Bachelor of Arts Degree <br> Programs

-120 semester hours (Liberal Arts)
-130 semester hours (Teaching) ${ }^{\text { }}$

## Communication - Theatre Major Teaching

This teaching major in communication and theatre is offered jointly by the departments of Communication Studies and Theatre. Required:

Communication: 48C:001; 48C:004; 48C:011; 48C:015; 48C:024; 48C:031; 48C:071; 48C:074; 48C:141; 48C:187; 48C:188 $\qquad$ 31 hours
Theatre: 490:001; 490:015; 490:034 (these three courses may be taken in any sequence; all are prerequisites for 490:161); 490:108; 490:161 $\qquad$ 14 hours
Applied Activity Option: one hour from: 48C:091/48C:191 or 48C:093/48C:193 or 490:050 ........ 1 hour
Electives: ( 3 hours from the following) 3 hours
Communication: 48C:108 or 48C:110; 48C:122; 48C:124; 48C:126; 48C:144; 48C:174; 48C:176; 48C:178.
Theatre: 490:040; 490:060; 490:061; other courses are available, consult with your advisor.

49 hours

## Theatre Major

Required:
Production core:
Theatre: 490:010; 490:050 ( 2 required-only ONE in performance); 490:054; 490:056; 490:066; 490:150 (2 required-only ONE in performance); 490:153 16 hours

## Class core:

Theatre: 490:015; 490:024; 490:034; 490:060; 490:061; 490:161

17 hours
6 hours from any of the focus areas listed below. 6 hours 39 hours

Students may elect to complete a focus area as part of their degra program.

## Performance ( 16 hours):

490:121; 490:122; 490:123; 490:124; 490:126.
Plus 3 hours from the following electives: 490:027; 490:125; 490:127; 490:129.

## Design and Production ( 15 hours):

490:040; 490:140 (3 required); 490:141; 490:142; 490:143.
Drams and Theatre for Youth (14-15 hours):
490:101; 490:102; 490:104; 490:106; either one elective outside the department chosen in consultation with advisor or 490:108.

## Communication - Theatre Minor Teaching

This teaching minor in Communication and Theatre is offered jointly by the departments of Communication Studies and Theatre.

Required:
Communication: 48C:001; 48C:004; 48C:011; 48C:024; 48C:074; 48C:187 18 hours
Option A or B 10-12 hours
Option A: Communication ( 10 hours)
Communication: one hour from 48C:091/48C:191 or $48 \mathrm{C}: 093 / 48 \mathrm{C}: 193 ; 48 \mathrm{C}: 015 ; 48 \mathrm{C}: 071$.
Theatre: 490:101 or 490:106.
Option B: Theatre ( 12 hours)
Theatre: 490:001; 490:015; 490:034; (these three classes must be taken before 490:161); 490:161

28-30 houre

## Theatre Minor

Required:
Production core:
490:010; 490:015; 490:050 (1 required); 490:150
(1 required) (only one Practicum in performance) .... 9 hours Class core:

A minimum of 12 credit hours in theatre as approved by thejdepartment

12 hours
21 hours

## Undergraduate Program Certificates

The University of Northern Iowa makes available, in addition to traditional programs, the opportunity for students to earn program certificates. Program sertificates provide an alternative to programs leading to a degree, a major, or a minor; they certify that an individual has completed a program approved by the university. The interested student should consult the department listed or the Office of the Registrar, which serves as the centralized registry.

## Department of <br> Communication Studies

## Certificate in Public Speaking

This certificate is designed to prepare students to become effective. speakers and presenters. The certificate is focused on skill development and allows the student to gain experience in message construction and delivery.

Required:<br>Communication: 48C:011; 48C:071; 48C:168; 48C:172.... 12 hours <br>Communication: 48C:020; 48C:074; 48C:123; 48C:176; 48C:178; 48C:189.

## Department of Computer Science

Certificate in Computer Applications<br>Required:<br>Computer Science: 810:021; 810:022; 810:023<br>9 hours<br><br>Computer Science: 810:030; 810:088.<br>Other courses pre-approved by the Computer Science Department.<br>12 hours

## Department of Design, Family and Consumer Sciences

## Certificate Program in Long Term Care

The Certificate Program in Long Term Care prepares students for employment with the elderly in long term care facilities in a variety of professional positions. This interdisciplinary program is coordinated in the Department of Design, Family and Consumer Sciences.
Required:
Accounting: 120:030 ..... 3 hours
Management: 150:153 ..... 3 hours
Design, Family and Consumer Sciences: 31F:150* ..... 3 hours
Health Promotion: 410:060 (correspondence only). ..... 2 hours
Psychology: 400:173** ..... 3 hours
Social Work: 450:173*** and either 450:172 or 450:174 . ..... 6 hours
*Prerequisite for 31F:150 (200:030 or 31F:055 or 400:120)
**Prerequisite for 400:173 (400:001)
***Prerequisite for 450:173 (450:041)

## Gerontology Certificate

Required:
$\qquad$ 3 hours

Sociology: 980:125**Practicum experience in gerontology (this includes 150contact hours working with older adults. If student hasan appropriate practicum experience in their major,this requirement is waived).

Electives: at least one course from each of the following three categories

2 hours

15 hours
I. Intra-Interpersonal Communications:

Design, Family and Consumer Sciences: 31F:020; 31F:150; 31F:153. Social Work: 450:193. Religion: 640:194.

## II. Public Policy and Aging:

Design, Family and Consumer Sciences: 31F:077; 31F:177. Social Work: 450:173.
III. Health and Environmental Issues:

Design, Family and Consumer Sciences: 310:130; 31F:055; 31 F:157.
Health Promotion and Education: 410:125.
*400:173 has prerequisite of 400:001 . 400:001 may be used to satisfy Category 5B of the Liberal Arts Core.
**980:125 has prerequisites of 980:001 and 980:060. 980:001 may be used to satisfy Category 5A and 980:060 may be used to satisfy Category 5C of the Liberal Arts Core.

## Department of Finance

## Financial Analysis Certificate

Required:
Finance: 160:266 (MBA students) or 160:161; 160:152; $160: 155 ; 160: 156$ (section 2 ); 160:156 (section 3 ) ..... 15 hours

15 hours*
In order to receive the Financial Analysis Certificate, all candidates must participate in the department's Financial Analysis Study Seminar, and pass the CFA ${ }^{\oplus}$ Level 1 exam administered by the Association of Investments Management Research (AlMR®). In addition, MBA students who are candidates for the Financial Analysis Certificate must participate in the department's Level 2 Examination Review sessions and register to take the CFA ${ }^{\text {® }}$ Level 2 examination administered by AIMR ${ }^{\oplus}$.
*Course prerequisites will lengthen this certificate for non-business majors.

## Department of Geography

## Certificate in Cartography and Geographic Information Systems (GIS)

The Certificate in Cartography and Geographic Information Systems (GIS) is designed to give the student a substantial background in the fields of cartography and geographic information systems. Students completing the program will be familiar with the terminology, techniques and theory of cartography and GIS principles. Hands-on computer experience is a major feature of many of the courses. The program complements majors in disciplines other than geography while increasing the
geography major's preparation for the job market.
The student must earn a grade point average of at least 3.00 in the courses taken for the certificate. It is the responsibility of the student to notify the Head of the Department of Geography during or immediately after the semester in which the course requirements will be or have been completed.

## Required:


Electives 6 hours
Two courses selected from:
Geography: 970:160; 970:163; 970:173; 970:175; 970:183.

## School of Health, Physical Education, and Leisure Services

Environmental Health Certificate

Required:
Health Promotion and Education/Environmental Science: $410: 165$ or $830: 165 ; 410: 166$ or $830: 166$. 6 hours

Electives: 6 hours chosen from either or both of the following categories
6 hours

15 hours

## I. Public Health Focus Area

Health Promotion and Education: 410:110 or 410:293; 410:145; 410:162; 410:176; 410:178.
Biology: 840:147.
II. Environmental Sciences Focus Area

Environmental \$cience: 830:200; 830:235.
Biology: 840:149; 840:151; 840:155; 840:167.

## Certificate in Global Healith/Culturally Competent Health Care

Required:
Health Promotion and Education: 410:138; 410:147; 410:161; 410:167; 410:197 9-11 hours
Electives selected from the following. 6 hours
Leisure Services: 430:030.
Social Work: 450:142.
Communication: 48C:151.
Social Science: 900:041; 900:080.
Political Science: 943:024; 943:125.
Sociology: 980:045; 980:111; 980:130; 980:148.
Anthropology: 990:011; 990:158; 990:160; 990:167; 990:168; 990:169; 990:177.

15-17 hours

## Outdoor Recreation Certificate

The Outdoor Recreation Certificate program is designed to train students for professional employment in the varied and growing field of outdoor recreation and adventure education. This program offers students the opportunity to develop skills in a variety of outdoor recreation activities while studying the theories, trends and issues involved in working with groups, facilitating adventure education, and managing
the impacts of recreation on our natural environment. The Certificatelin Outdoor Recreation is available to students in all majors.

## Required:

Leisure, Youth and Human Services: 430:050; 430:130; 430:143; 430:146.

12 houra
Outdoor recreation activity skills classes: 420:xxx; 440:xax

3 houre
15 hours

## School-Age Care Leadership Certificate

This certificate is designed to provide students participating in the Camp Adventure Youth Services program an opportunity to receive credit for their application of youth development principles to school-age children (ages 5-12) in global settings.

## Required:

Leisure, Youth and Human Services: 430:141; 430:144;


Educational Psychology and Foundations: 200:017; 200:109; 200:116; 200:235.
Design, Family and Consumer Sciences: 31F:010; 31F:020; 31F:055

17-18 hours

## Tourism Certificate

The Tourism Certificate is administered by the Leisure, Youth and Human Services Division within the School of HPELS, College of Education. For information on this program certificate, interested studentll should contact the Division of Leisure, Youth and Human Services, Tous-1 ism Advisor, 203 WRC.

Required:
Tourism: 43T:070; 43T:075......................................o.o......a....... 6 hours
 Leisure, Youth and Human Services: 430:172. Tourism: 43T:170; 43T:171.
Economics: 920:024 or 920:053............................................... 3 hours
One course from the following, .o.oso....................................... 3 hours
Management: 150:153.
Leisure, Youth and Human Services: 430:110; 430:146; 430:168.
Tourism: 43T:173.

## Youth Agency Administration Program Certificate

Students completing all hours for the Youth Services Administre tion minor plus 430:187 Internship (8 hours) and 430:184 Senior Projec ( 1 hour) are eligible for the Youth Agency Administration Certificate in American Humanics, Inc. Requirements are as follows:

## Required:

Youth and Human Service Administration: 43Y:060;
43Y:150; 43Y:151; 43Y:154; 43Y:155 ............................ 15 hours
Leisure Services: 430:188 ...o.ooo.........o.o..................................... 2 houre
Leisure Services Senior Project: 430:184................................ 1 hour
Leisure Services Internship: 430:187.................................... 8 hour
26 hours
Youth Development in Religious Settings Certificate
The Youth Development in Religious Settings certificate prepares students for work with young people in a variety of religious organizations and contexts. This interdisciplinary program is jointly offered by the Division of Leisure, Youth and Human Services within the School of HPELS and the Department of Philosophy and Religion.
Required:Youth and Human Service Administration: 43Y:060;
43Y:154; 43Y:155; 43Y:157 12 hours
Religion: 640:024; 640:141; 640:142 ..... 9 hours
Elective: one of the following ..... 3 hoursReligion: 640:040; 640:117; 640:130; 640:132; 640:134;640:136; 640:171.
Philosophy: 650:050.

$$
24 \text { hours }
$$

## Department of History

## Certificate in Public History

This certificate is available to history majors and non-history majors who have completed a prescribed course of study within public history. This program exposes students to the array of opportunities available in the fields of public history and an opportunity to add an experiential component to their academic education. Individual curricula will be defined in consultation with the program's director.

## Required:

> History: 960:106......a.o..........................aco............................... 3 hours Two history courses at the 100-level or above........................ 6 hours 6 hours Two semesters of $960: 132$ or 960:179 ............................. 15 hours

## Department of Industrial Technology

## Technology Management Certificate

Required:
Industrial Technology: 330:020; 330:065 (3 hrs.); 330:142;
330:143; 330:187; 330:196. $\qquad$
18 hours
*800:072 is a possible prerequisite for $330: 142$ and $330: 143$.

## Department of Management

## Training and Development in Business Certificate Required: <br> Management: 150:113; 150:116; 150:119*; 150:130......... 12 hours <br> Electives from the following .............................................................. 3 hours <br> Management: 150:169**; 150:179**

15 hours***
*Graduate students must take 150:262 instead of 150:119. 150:262 has prerequisites of consent of MBA Director and 150:153 or equivalent. ** $150: 169$ or $150: 179$ must be taken only after takíng $150: 116$ or $150: 130$. 150:187 may be used as a substitute for $150: 169$ or $150: 179$, with consent of instructor. 150:187 requires additional prerequisites.
***In addition to the required 15 hours, 150:113 has as a prerequisite 620:005 or 620:015, either of which will satisfy Category 1A of the Liberal Arts Core.

## Department of Marketing

## Certificate in Entrepreneurship

The Certificate in Entrepreneurship is open to declared business majors only. The purpose of the program is to engage students in active participation in the development of entrepreneurial businesses. They will do this through a combination of traditional course work specifically directed to the entrepreneurial firm and participation in a significant live business experience, either through the development of a business plan for a new firm or through an internship in an ongoing entrepreneurial enterprise. Students must have junior standing and be admitted to the College of Business Administration in order to complete this certificate.

Required:
Marketing: 130:172; 130:173 or 150:175; 130:186 ................ 9 hours
Electives: one of the following. 3 hours
Accounting: 120:141.
Marketing: 130:131; 130:150; 130:153; 130:160; 130:166; 130:187; 130:198.
Management: 150:113; 150:119; 150:125.
Finance: 160:140; 160:162.
Economics: 920:148.
12 hours

## Certificate in Marketing Research and Consulting <br> Required: <br> Marketing Research: 130:108* ........eso................................... 3 hours <br> Marketing: 12 semester hours of Professional Development Training as a Program Associate with Strategic Marketing Services. Credits must be gained through any combination (maximum of 6 credit hours per semester) of the following marketing courses: 130:169; 130:179; 130:182**; 130:186 ......... 12 hours

Electives: one of the following.................................................... 3 hours
Marketing: 130:106; 130:142; 130:177; 130:178; 130:191. 18 hours
*130:108 has prerequisites of 920:024 or 920:053, 130:101, 150:080, 800:072 or 800:092, 920:020, and 920:070. Taking 800:072 or 800:092 will satisfy Category 1C of the Liberal Arts Core. Non-business majors who take 920:024 or both 920:053 and 920:054 will satisfy the requirements for Category 5B of the Liberal Arts Core.
** 130:182 has a prerequisite of 130:108.
Students should contact the Director of Strategic Marketing Services, CBB 5, and the Marketing Department, CBB 338.

## Department of Modern Languages

## Certificate in French Language Studies

## Required:

15 semester hours of course work, selected from the

French: 720:001; 720:002; 720:003; 720:004; 720:011; 720:012; 720:051; 720:061; 720:101; 720:102; 720:103.

15 hours
A written and/or oral proficiency examination at the discretion of the certificate committee.

## Certificate in German Language Studies

Required:
15 semester hours of course work, selected from the
following
German: 740:001; 740:002; 740:003; 740:004;
$\quad 740: 011 ; 740: 012 ; 740: 013 ; 740: 014 ; 740: 100 ;$
$\quad 740: 101 ; 740: 103 ; 740: 104$
A written and/or oral proficiency examination at the discretion of the certificate committee.

## Certificate in Hispanic and Portuguese Studies

 Required:> Spanish: 780:104

OR
Portuguese: 790:031 ............................................................. 3 hours
Portuguese courses above 790:001....................................... 6 hours
Spanish courses above 780:002 6 hours
15 hours

## Certificate in Portuguese Studies

Required:
15 semester hours of course work, selected from the

## following

$\qquad$ 15 hours
Portuguese: 790:001; 790:002; 790:010; 790:020; 790:031 or any 620:031 section cross listed with 790:031; 790:060; 790:101; 790:109; 790:123; 790:180
or course pre-approved by department.
15 hours
A final essay and interview are required.

## Certificate in Russian Language Studies

Required:
15 semester hours of course work, selected from the following. 15 hours
Russian: 770:001; 770:002; 770:003; 770:004; 770:011; 770:012; 770:013; 770:014; 770:091; 770:101; 770:103.

15 hours
A written and/or oral proficiency examination at the discretion of the certificate committee.

## Certificate in Spanish Language Studies

Required:
12 semester hours of course work, selected from the

> following.

12 hours
Spanish: 780:011; 780:053; 780:055; 780:091;
780:100; 780:101; 780:102; 780:103; 780:104;
780:105; 780:179.
12 hours
A written and/or oral proficiency examination at the discretion of the certificate committee.

## Certificate in Spanish for Special Purposes

A minimum of 12 credit hours beyond 780:011 Intermediate Spanish is required.

## Required:

Spanish: 780:053* (2-3 hrs.); 780:101; 780:102* (2-3 hrs.)

Electives:
Select one course from each of the following two categories

5-6 house
a. Spanish: 780:107 (2-3 hrs.); 780:108.
b. Humanities: 680:123.

Spanish: 780:120; 780:123; 780:127.
*Area of concentration (must be same area of concentration)

- Medical Spanish
- Business Spanish
- Spanish for Social Services
- Spanish for Criminology and Law Enforcement
- Spanish for Tourism
- Spanish for Journalism and Broadcasting


## International Commerce Certificate

Required:
A major or minor in a modern language.
The following courses:

Management: 150:153; 150:189 ................................... 6 hours
Advanced writing course: 7xx:101................................. 3 hours

Elective course in culture and civilization in the respective
modern language, or other approved course ...................... 3 hours
18 hours

## Certificate in Translation (in French, German, Portuguese, Russian or Spanish)

## Required:

15 semester hours of course work, distributed as follows: Courses in translation
now-9 hours
Complementary courses approved by faculty


15 hours
An exam and/or portfolio may be required at the discretion of the certificate committee.

## Department of Philosophy and Religion

## Youth Development in Religious Settings Certificate

The Youth Development in Religious Settings certificate preparey students for work with young people in a variety of religious organizu tions and contexts. This interdisciplinary program is jointly offered by the Department of Philosophy and Religion and the Division of Leisurey Youth and Human Services within the School of Health, Physical Educiy tion and Leisure Services.

Required:
Youth and Human Service Administration: 43Y:060; 43Y:154; 43Y:155; 43Y:157

12 hours

Elective: one of the following 3 hours
Religion: 640:040; 640:117; 640:130; 640:132; 640:134; 640:136; 640:171.
Philosophy: 650:050.
24 hours

## Department of Psychology

## Industrial and Organizational Psychology Certificate

This certificate provides students with the skills and knowledge necessary to be competitive in a professional human resources or consulting environment.

## Required:

Psychology: 400:025*; 400:157*; 400:158 ............................... 9 hours
Electives: two courses from the following........................................... 6 hours
Management: 150:119; 150:165^; 150:166^^
Ethics in Business: 150:174 or 640:174 or 650:174
Psychology: 400:106**: 400:134*; 400:162***
Communication Studies: 48C:134~; 48C:135~~
15 hours
Choice of courses and subsequent course prerequisites may increase the length of this program.
*400:025, 400:134, and 400:157 have a prerequisite of $400: 001$, which may be used to satisfy Category 5B of the Liberal Arts Core.
** $400: 106$ has a prerequisite of $400: 001$ and 400:101. Course 400:001 may be used to satisfy Category 5B of the Liberal Arts Core.
${ }^{* * *} 400: 162$ has prerequisites of 400:001, 400:101, and 400:160. Course 400:001 may be used to satisfy Category 5B of the Liberal Arts Core.
^150:165 has prerequisites of $150: 153 ; 800: 072$ or $800: 094$ or equivalent; and 920:070. Course 800:072 may be used to satisfy Category 1C of the Liberal Arts Core.
^^150:166 has a prerequisite of 150:153.
$\sim 48 \mathrm{C}: 134$ has a prerequisite of $150: 153$ or 48C:132
$\sim \sim 48 \mathrm{C}$ : 135 has a prerequisite of 48C:132.

## Department of Social Work

## Social Work Certificate

Students who graduate with a major in Social Work from UNI receive a Bachelor of Arts degree with a Social Work Certificate. For information on the Social Work Major see page 124.

## Substance Abuse Counseling Certificate

This UNI certificate program is designed to prepare Social Work majors for the field of substance abuse treatment. To receive a UNI certificate, a student must complete the requirements for the Social Work major (including graduation with the B.A.) and the specific course work and field instruction experiences as indicated.

## Required:

Social Work: 450:171 ..................................................................... 3 hours

Psychology: 400:170.
Social Work: 450:121; 450:142; 450:143; 450:174; 450:175.

12 hours
Field Instruction: Students will spend a total of 440 hours in an inpatient or outpatient treatment program. To secure a field placement site the student may need to travel out of town. Experience with individuals, families, and groups will be required.

## Department of

Sociology, Anthropology and Criminology

Certificate in Criminology<br>Required:<br>Sociology: 980:001; 980:022; 980:122; 980:123; 980:126; 980:127<br>18 hours 18 hours

## Skills in Social Research Certificate

Required:
Sociology: 980:080; 980:108; 980:178/990:178.......coco...co.o.o. 9 hours
Nine hours from the following... 9 hours
Sociology: 980:160; 980:165.
Anthropology: 990:152; 990:171.
Three hours from the following.... 3 hours
Sociology/Anthropology: 980:145/990:145;
980:184/990:184; 990:172.
21 hours

## College of Business Administration

## Certificate in International Business

The Certificate in International Business is available to College of Business Administration students majoring in Accounting, Econom-ics-Business Analysis Emphasis, Finance, Management, Management Information Systems, Marketing, and Real Estate and to students taking the General Business Concepts minor. The purpose of the Certificate is to provide students who are interested in international business with an education that will assist them in meeting their career goals. For more information and to enroll in this program, students must contact Atul Mitra, College of Business Administration.

3. Foreign Language, History, and Culture. 7-20 hours
Select one of language options below.
SPANISH (8-20 hours)
780:001**; 780:002**; 780:011.
One of the following: 680:123*; 780:152;
790:031*; 944:167; 960:176; 960:180.
FRENCH (7-19 hours) 720:001**; 720:002**; 720:011.
One of the following: 720:031*; 720:111;960:174.
GERMAN (8-18 hours)
740:001**; 740:002**; 740:003**; 740:004**; 740:011;
740:012. One of the following: 740:031*; 740:111;
740:123***; 740:150***; 960:171; 960:172.
PORTUGUESE (6-18 hours)
790:001**; 790:002**; 790:010**; 790:020**; 790:060.
One of the following: 680:123*; 790:031*; 790:123***; 944:167; 960:176; 960:180.

```
RUSSIAN (8-18 hours)
    770:001**; 770:002**; 770:003**; 770:004**; 770:011; 770:013.
    One of the following: 680:121*; 770:031*; 770:141***;
    770:142***; 944:164;960:169;960:170;960:173.
JAPANESE (8-18 hours)
    730:001**; 730:002**; 730:011.
    One of the following: 680:122*; 640:130.
```

*Credit hours in these Liberal Arts Core courses may be applied toward the completion of the Liberal Arts Core requirement and the completion of this certificate program.
**Students who received credit toward the foreign language competency requirement for UNI graduation from satisfactory performance in high school language courses or students who can pass an equivalency examination do not need to take these courses.
***These courses require additional prerequisites in the foreign language.

## SUMMARY:

1. International Business ............oco.a........................................... 3 hours


Spanish: 8-20 hours
French: 7-19 hours
German: 8-18 hours
Portuguese: 7-18 hours
Russian: 8-18 hours
Japanese: 8-18 hours .

$$
\overline{13-26} \text { hours }
$$

Students pursuing the International Business Certificate must declare their intent on a declaration of curriculum form. The form may be obtained in CBB 321 B .

## College of Humanities and Fine Arts

## Certificate in Leadership Foundations

The Certificate in Leadership Foundations is an interdisciplinary program that educates students about and for leadership in a democratic society. This certificate provides an overview of diverse leadership theories, concepts, and issues, and assessment of one's leadership styles and abilities. It is open to any student; prior experience in leadership activities is not required. A minor in leadership studies is also available and carries a leadership internship.

Prerequisite for admission: 2.50 GPA or permission of director.
Students who are pursuing the Leadership Studies minor or the Certificate in Leadership Foundations must have an overall GPA in the core courses, including the internship, of 2.50 with no lower than a C in any one course.

[^9]
# College of Social and Behavioral Sciences 

## Conflict Resolution Certificate

The Conflict Resolution Certificate curriculum is designed for students from diverse majors whose anticipated careers would likely provid opportunity for understanding and conducting conflict resolution. To encourage breadth, the selections from any given discipline are restrictal to two courses.

## Required:

Social Work/Sociology/Anthropology: 450:102 or 980:102 or 990:102 3 hour
Electives: four of the following 12 hours
Social Work: 450:142*; 450:193**.
Communication: 48C:136***; 48C:148***.
Political Science: 943:125.
Geography: 970:116.
Choice of courses and subsequent course prerequisites may incread the length of this program.
*450:142 has a prerequisite of 450:041, which may be used to satisfy Cat-1 egory 5C of the Liberal Arts Core.
${ }^{* *} 450: 193$ has a prerequisite of 450:192.
*** $48 \mathrm{C}: 136$ and $48 \mathrm{C}: 148$ have a prerequisite of $48 \mathrm{C}: 004$.


## Graduate Program Certificates

The University of Northern lowa makes available, in addition to traditional programs, the opportunity for students to earn program certificates. Program certificates provide an alternative to programs leading to a degree, a major, or a minor; they certify that an individual has completed a program approved by the university. The interested student should consult the department listed or the Office of the Registrar, which serves as the centralized registry.

## Department of Communication Studies

## Graduate Certificate in Corporate Communication

This is a 15 -hour certificate designed to provide advanced studies distinct from existing M.A. programs in the department (i.e., public relations, organizational communication, etc.). This certificate is designed to provide enhanced communication skills, abilities and knowledge necessary for effective functioning in business settings.

Required:
Communication: 48C:134; 48C:135; 48C:166 or another course in communication approved by the advisor; 48P. 184 $\qquad$ 12 hours

Communication: 48C:222; 48C:232.
Public Relations: 48P:282.
$\overline{15}$ hours

## Program prerequisites:

Students who apply to this program must be admitted to graduate studies at UNI under the degree status category. Consult the Graduate College and/or the Department of Communication Studies for further information.

# Department of Educational Leadership, Counseling, and Postsecondary Education 

## Advanced Studies Certificate in Educational Leadership

## Emphasis: Principalship

This is a post-master's program consisting of a minimum of 33-34 semester hours leading to the issuance of an Advanced Studies Certificate in Educational Leadership. The purpose of this program is to allow the student to broaden and sharpen her/his skills in competency areas. This is solely for the purpose of gaining endorsement in the Principalship.

The program will consist of a minimum of 33-34 semester hours in graduate studies in the area of educational leadership and/or related studies.

Required:
Educational Psychology: 200:116 or 200:232 ....................2-3 hours
Special Education: 220:260 .................................................. 3 hours
Educational Leadership: 270:206; 270:208; 270:224; 270:232; 270:245; 270:247; 270:249; 270:280;
270:282; 270:284. 25 hours

Educational Leadership practicum: 270:290
(Elementary Principalship) or 270:290 (Secondary Principalship) [Student enrolls in both practicums
 33-34 hours

## Emphasis: Superintendency Proparetion Program Sequence/core courses:

Educational Leadership: 270:340; 270:346
6 hours
Educational Leadership pacticum: 270:397
6 hours

Each core course requires three credit hours in traditional class time in order to build knowledge foundation and develop skills. Each core course also requires a three-credit hour practicum that is student-district specific, has a work product planned with and supported by the mentor, and is of sufficient magnitude to have district-wide impact.

## Sequence/key courses:

Educational Leadership: 270:310; 270:311; 270:314 ........... 9 hours
Educational Leadership seminar: 270:389............................. 3 hours
Educational Leadership internship: 270:391 ........................ 2 hours
33 hours

## Internship

A $11 / 2$ year performance-based internship (a minimum of 12 months) requiring a minimum of 450 hours as an intern working in concert with the superintendent of schools (mentor) and her/his staff. The internship should include work intensity in governance including improvement of board/superintendent relations; alignment of curriculum, instruction, and professional development with district mission, vision, and goals; hiring, induction, retention and compensation of staff; curriculum assessment and accountability, instructional leadership with a focus on improvement of student achievement; and identification of future needs and challenges with appropriate planning. The internship should also include networking through at least one state and one national educational leadership conference. One-day workshops provided by the University of Northern lowa designed to lend knowledge and skill support during the internship will count toward completion of the internship. Workshops may include but are not limited to technology, special education law, legal research, and other high need areas as identified by students.

## Assessment

A performance-based program requires evidence that Standards for School Leaders (SSL) are met. Standards must be demonstrated through work products that clearly show skill development and an expansive knowledge base.

## School of Music

## Artist Diploma (I) (II) Graduate Certificate

The Artist Diploma is a non-degree-granting professional program awarded by the School of Music for the successful completion of performance studies combined with general music studies. The curricular content of the proposed Artist Diploma program is designed to provide the student aspiring toward a professional career the opportunity to study and perform solo literature and chamber music without taking all the academic course requirements of a masters degree.

The Artist Diploma serves the needs of international and national students who are extremely talented, career minded, and dedicated to the art of music-making. Admission is considered once the student has completed a baccalaureate degree, or the international equivalent. Applicants not holding the baccalaureate degree or its equivalent but who have extensive study with a master teacher and noted performing experience, may apply. Interested students should contact the Associate Director of Graduate Studies within the School of Music.

## Artist Diploma (I)

Diploma (I) may be completed in two semesters, and requires a minimum of 14 hours in the following program:

## Required:

Applied Music: 540:2xx 6 hours
Ensemble, or chamber ensemble, or opera performance,


(Courses must be selected from 100 g and 200 -level offerings available during the period of residency. Vocal students may include up to 3 hours of foreign language study. Only 2 hours of ensemble credits beyond the requirements will count toward music electives. No additional applied music hours will count toward music electives.)

14 hours
Additional requirements:

- Applied jury examination as required
- One full solo recital
- All course work must be completed with a grade of B or higher, and applied study with a grade of $A$.


## Artist Diploma (II)

Diploma (II) may be completed in four semesters, and required a minimum of $\mathbf{2 8}$ hours in the following program:

## Required:

Applied Music: 540:2xax
Ensemble, or chamber ensemble, or opera performance, or collaborative playing.

4 hours
Electives in music.
12 houra
(Courses must be selected from 100 g and 200 -level offerings available during the period of residency. Vocal students may include up to 6 hours of foreign language study. Only 4 hours of ensemble credits beyond the requirements will count toward music electives. No additional applied music hours will count toward music electives.)

28 hours
Additional requirements:

- Applied jury examination as required.
- Two full solo recitals.
- All course work must be completed with a grade of B or higher, and applied study with a grade of A .



## www.grad.uni.adu

See pages 4-12 for general view of the university. The University of Northern lowa offers advanced programs leading to graduate degrees in:

Master of Accounting
Master of Arts
Master of Arts in Education
Master of Business Administration
Master of Music
Master of Public Policy
Master of Science
Master of Social Work
Specialist
Specialist in Education
Doctor of Education
Doctor of Industrial Technology
The University of Northern lowa is a member of the Council of Graduate Schools in the United States and continues its endeavors to meet the needs of higher education and advanced preparation in diverse career fields with a strong and growing graduate program. Graduate degree programs were initiated at UNI in 1951 when the university was authorized by the Board of Regents, State of Iowa to offer a program of graduate work leading to the Master of Arts in Education (M.A.E.) the program began with the summer session of 1952. In 1960 the graduate program was extended with the addition of a sixth-year program leading to the Specialist in Education degree. The addition of the Doctor of Education (Ed.D.) program, approved by the Board of Regents, State of lowa in 1982, enables UNI to offer a complete course of professional preparation for the educational practitioner. Four intensive study areas are available through this degree program: curriculum and instruction; educational leadership; leisure, youth and human services; and special education.

In recognition of a more general need for advanced study, the university further expanded the graduate program in 1965 with the addition of the Master of Arts (M.A.) degree. This program is open to students who plan to pursue careers in fields other than education and is available, as well, to students interested in doing advanced work in teaching fields - elementary, secondary, and college level. More advanced study in these areas was made possible under the program leading to the Specialist degree inaugurated in 1970.

The addition of the Master of Business Administration (M.B.A.) degree in 1975, the Master of Music (M.M.) degree in 1976, the Master of Public Policy (M.P.P.) in 1991, the Master of Science (M.S.) in 1993, the Master of Social Work (M.S.W.) and the Master of Accounting (MAcc) in Fall 2000 demonstrates the university's continued recognition of the changing needs of higher education and the institution's desire to meet those needs. The Master of Business Administration degree is open to students whose career interests are in the fields of business those already working in the general community, as well as students who have not yet entered their major career field. The Master of Music is a professional degree designed for the student planning a career in college or secondary school teaching, for a performance career as a professional musician or composer, or for further study at the doctoral level. The Master of Public Policy is an interdisciplinary professional degree preparing students for careers principally in the public sector. The program is structured to accommodate both full-time students and those already in positions in public organizations. The Master of Science degree is offered in Athletic Training, Biology, Chemistry, Computer Science and Environmental Science/Technology/Health and is designed to prepare students for positions in those areas. The Master of Social Work degree is designed to prepare students for the advanced practice of social work in a variety of public and non-profit settings. The Master of Accounting
degree is designed for Accounting majors, however, other majors within the College of Business Administration may be admitted to the program.

The Doctor of Industrial Technology, the university's first doctoral program, was authorized by the Board of Regents, State of lowa to begin with the 1978 fall semester. This doctoral program provides advancedlevel study in industrial technology for a wide variety of professional fields and includes the study of the technological systems used in industry and their effect on society and culture.

Graduate majors are available in most departments, and graduatelevel courses are offered by all departments of the university.

Those who wish to continue their professional and cultural growth without fulfilling the requirements for a graduate degree may do so if they satisfy the requirements for admission to graduate study.

## The Quad-Cities Graduate Study Center

The University of Northern Iowa is one of nine colleges and universities of Iowa and Illinois which are participating in the Quad-Cities Graduate Study Center, with offices in Rock Island, Illinois. The cooperating institutions offer graduate courses, and appropriate courses completed at the center may be regarded as residence credit by the institution at which the student is working toward a graduate degree, when such is approved for inclusion in the student's degree program. An interested student should confer in advance with the head of her/his major department. Preliminary inquiries may be directed to the Dean of the Graduate College.

## Graduate Credit for Undergraduate Students

Undergraduate seniors who are in their final semester and within eight semester hours of graduation, or in their final summer session and within four hours of graduation, may register for graduate credit with the approval of the head of the department offering the course work Approval by departments and the Graduate College must be obtained on a Student Request form if the cumulative GPA is below 3.00. The student presents the Student Request form, with appropriate signature(s), when scheduling for class. Their combined total of course credits, both undergraduate and graduate, may not exceed fifteen hours in a semester or eight hours in a summer session, and they must be enrolled in sufficient undergraduate work to complete the bachelor's degree in the semester or summer session in which application is made.

Graduate work completed on the early admission basis will be counted as graduate credit only if the student actually earns the bachelor's degree at the end of the semester or summer session in which the work is taken. Such credits may or may not be counted toward graduate degree programs at the discretion of the graduate department.

## Program Certificates

The University of Northern Iowa makes available, in addition to traditional programs, the opportunity for students to earn program certifcates. Program certificates provide an alternative to programs leading to a degree, a major, or a minor; they certify that an individual has completed a certificate program approved by the university. For further information concerning requirements for these certificates see pages 129-136, or consult with the department listed or the Office of the Registrar.

# Licensure and Endorsements 

Licensure. For approval in some graduate programs, a student must have earned or be eligible for teacher licensure or its equivalent endorsed in an area appropriate to the graduate major. For information on licensure, consult the Office of the Registrar.

Teaching Licensure and Endorsements. Students interested in securing licenses to teach in another state should secure information directly from the State Department of Education in that state.

Addresses of different state departments may be obtained from Career Services or the Office of the Registrar.

## Post-Baccalaureate, Undergraduate Study

A student who has received a bachelor's degree may choose to apply for further study at the University of Northern Iowa as an undergraduate rather than a graduate student. Inquiries should be made to the Office of the Registrar. Undergraduate status will be accorded students who seek:

1. a second baccalaureate degree (designation as senior) or
2. teacher licensure (designation as senior) - a student who does not hold a teaching certificate and expects to be recommended by this university for an original certificate must also file an official transcript, or
3. courses for undergraduate credit (designation as unclassified)

Students with baccalaureate degrees do not earn graduate credit while remaining in this undergraduate classification. They must be admitted either to graduate Degree or Non-Degree Status before they can receive graduate credit for their course work (courses numbered $100[\mathrm{~g}]$ or 200).

## Admission to Graduate Study

(This section applies to all students taking graduate courses at the University of Northern Iowa after receiving the bachelor's degree.)

The admission procedures of the Graduate College are administered separately from those of the university's undergraduate program. Prospective students may apply for graduate admission under one of two categories: Degree Status or Non-Degree Status. Each category carries specific regulations. Applications for U.S. residents can be obtained and completed online at www.uni.edu/applications. The completed Application for Admission to Graduate Study should be mailed to the Office of the Registrar, Gilchrist 243, Cedar Falls, IA 50614-0006. International students should contact the Office of Admissions at www.uni.edu/~admiss or by phone 319-273-2281 or by fax 319-273-2885.

Admission to graduate study does not guarantee admission to an advanced degree program. Responsibility for determining eligibility for admission to graduate degree programs rests primarily with the academic departments. The academic departments are responsible for receiving degree status admission applications and for determination of admissibility. (See pages 138-139 for further details.)

A graduate of a college or university accredited by the North Central Association of Colleges and Secondary Schools or a corresponding regional agency will be granted admission to graduate study if her/his application for admission has been approved. See pages 139-140 for regulations governing admission to graduate study.

A graduate of a college or university that is not accredited may be granted provisional admission at the discretion of the Dean of the Graduate College.

Note: Students with a recognized baccalaureate degree who are seekin a second baccalaureate degree, teaching endorsements or approvals throus UNI recommendation, and/or miscellaneous undergraduate course worlis may be admitted through the undergraduate Office of Admissions. Thest students pay undergraduate fees and may not apply credit earned toward' a graduate program.

## Application Dates

Applications for Degree-Status admission and all credentials required for admission should be on file in the Office of the Registrar at least one month before departmental review. Students must contact the academic department regarding application review deadlines.

International students should note the special application deadlinel required by the International Services Office.

Applicants for Non-Degree Status will be accepted up to five days. before registration.

## Requirements for Admission to Degree Status

The admission process for Degree Status begins when the application for admission and all supporting documents and fees have been received in the Office of the Registrar. U.S. and international students who are seeking financial assistance and wish to receive the fullest consideration must submit a completed application (please see following requirements) by February 1. Many graduate departments have earlier deadlines, which are indicated in their department materials. All departmental materials should be reviewed carefully for information about early deadlines. U.S. students must submit a completed application to the Office of the Registrar. International students must submit a completed application to the Office of Admissions. Requests for Degree Status are reviewed and acted upon by the appropriate academic depart ${ }_{9}$ ments, the Office of the Registrar, and the Graduate College.

An applicant who has a bachelor's degree from a college or university accredited by the North Central Association of Colleges and Seconda ary Schools or a corresponding regional agency will be granted admission to graduate study if her/his application for admission has been approved See pages 139-140 for regulations governing admission for graduate study. The Office of the Registrar determines that the applicant has an accredited bachelor's degree or will complete the bachelor's degree before commencing graduate study. A graduate of a college or university that is not accredited may be granted provisional admission at the discretion of the Dean of the Graduate College.

A student who expects to earn a graduate degree at this university, must file an official transcript from the college or university granting the baccalaureate degree if other than the University of Northern lowa. Degree Status applicants who have attended other colleges or universities after earning the bachelor's degree must file an official transcript of each record. Only transcripts sent directly from the issuing institution to the UNI Office of the Registrar are considered official.

The applicant should check with the department offering the major of her/his choice, to determine whether/which Graduate Record Examination (GRE) tests are required prior to admission. If required, the applicant must request that the scores be sent directly from the testing agency to the Office of the Registrar.

Students applying for admission to a graduate degree program in the College of Business Administration are required to submit their scores from the Graduate Management Admission Test (GMAT). They need not take the Graduate Record Examination (GRE). The student must request that the testing agencies forward her/his test results directly to the Office of the Registrar.

All applicants who are not native speakers of English are required to take the Test of English as a Foreign Language (TOEFL). International students should contact the Office of Admissions, University of Northern Iowa, for explanation of requirements. The minimum TOEFL score required for admission to graduate status is 500 (paper-based)/173 (com-puter-based). Individual departments may require a higher score.

Additional admission requirements (e.g., departmental application, letters of reference, goal statement, etc.) may be established by departments. Students should contact the department for this information.

Students will be admitted to Degree Status on one of two bases:

## A. Unconditional Status

The minimum undergraduate grade point average, or prior graduate degree grade point average, required for unconditional admission is 3.00 (" $B^{\prime \prime}=3.00$ ) or its equivalent. Individual academic departments may require a higher grade point average for admission.

Degree status is accorded students who meet the minimum GPA requirement, have submitted all official transcripts, and are deemed qualified by academic departments which can culminate in the earning of a graduate degree. Applicants are to specify their choice of degree program in their admission application.

## B. Provisional Status

At the discretion of the academic department concerned, an applicant (with an, undergraduate and prior graduate GPA of less than 3.00) may be admitted as a Provisional Degree Student. A Provisional Degree Student is admitted to a graduate program, subject to certain reservations/requirements. The department must notify the student in writing upon admission of its reservations and requirements that must be satisfied before a student may be removed from provisional status.

A Provisional Degree Student who completes eight (8) or more graded hours of a degree program with a 3.00 grade point average, or better, is generally eligible for reclassification to Degree Status. The responsibility for such reclassification rests with the academic department concerned. Reclassification review should take place the semester after the student has completed eight (8) semester hours in their graduate program. The department has responsibility for notifying the Dean of the Graduate College about the reclassification decision. No student may receive a UNI graduate degree while on provisional status. The department admitting a student to its graduate degree program will draft a letter of acceptance to be sent to the student; this letter will describe the requirements necessary for completion of the degree program in question.

Status Acceptance and Waivers. Any waivers of degree requirements as established by a department must be furnished to the applicant by the department in the letter of acceptance (for waiver procedures see page 141).

## Requirements for Admission to NonDegree Status

Non-Degree Status has been established for the post-baccalaureate student who:
A. wishes to take courses for self-enlightenment unrelated to any graduate degree program.
B. plans to demonstrate competence in graduate studies in support of consideration for admission to a degree program at a later time.
The admission process for Non-Degree Status applicants begins when the application for admission and all supporting documents have been received in the Office of the Registrar. Requests for Non-Degree Status are reviewed and acted upon within the Office of the Registrar.

An applicant must have a bachelor's degree from an accredited college or university. All students wishing to receive graduate credit must file an official transcript from each college or university from which they have received a degree, unless the degree was obtained from the University of Northern lowa. Only transcripts sent directly from the issuing institution to the UNI Office of the Registrar are considered official.

All applicants who are not native speakers of English are required to take the Test of English as a Foreign Language (TOEFL). International students should contact the Office of Admissions, University of Northern lowa, for explanation of requirements. The minimum TOEFL score required for admission to graduate status is 500 (paper-based)/173 (com-puter-based).
NOTE: Academic departments are not obliged to count toward their degree programs any credit for course work undertaken in a Non-Degree Status. If a department decides to accept such credit, no more than 12 semester hours may be counted toward a degree program.

## Classification of Residents and Nonresidents for Admission, Tuition, and Fee Purposes

See pages 14-16 for further details.

## Academic Regulations

## Academic Discipline

Graduate students on degree programs are expected to maintain high academic standards. At the end of each term and when incomplete grades revert to $F$ (Failure) graduate student records are reviewed. Students with unsatisfactory performances are placed on probation or suspended from graduate degree programs and any graduate enrollment at UNI.

A student who has registered for nine (9) semester hours in a program of study and attained a cumulative GPA less than 3.00 in that program will be placed on probation. If the student registers for eight (8) hours while on probation without qualifying as a degree candidate (GPA of 3.00 ), the student is reviewed at the end of the term for suspension from graduate degree programs. A student who has registered for eighteen (18) semester hours in a program of study and attained a cumulative GPA less than 3.00 in that program will be suspended. Students placed on academic suspension cannot enroll in non-degree graduate status or take courses in the student's program of study during the year of academic suspension. Reinstatement: After one full calendar year, students who wish to enroll in classes must re-apply to their degree program and receive approvals from their departments and the Graduate College for reinstatement.

When a student is suspended, at least one calendar year must elapse before reapplication for admission to a graduate degree program may be made. Applications for Readmission to Graduate Study must be approved by the department and the Graduate College before a student will be removed from academic suspension. Such applications must be submitted to the Dean of the Graduate College.

A student reinstated after suspension who fails to attain a cumulative GPA of 3.00 in the program of study for the first enrollment period will be permanently suspended from the graduate program.

In determining a graduate student's grade index, all graded course work attempted at this university within the student's program of study will be used as a basis of computation. If the student has not yet filed a program of study, all graduate courses will he used as a basis of computation. If a graduate student repeats a course, both grades will be used in computing the index.

No more than six (6) semester hours of $C$ credit ( $C+, C, C$-) earned within the program of study may be applied toward credit for graduation. When $C$-range grades in the program of study exceed the six hour limit, one or more of such courses must be repeated. The original grade for any repeated course will be included in computation for the cumulative GPA in the program of study, as well as in the overall GPA. A course taken to satisfy degree requirements in which a student receives a $D$ or $F$ grade will not be considered satisfactory and must be repeated. The original grade for any repeated graduate course ( $100 \mathrm{~g}, 200$, and 300 ) will be included in the computation for the cumulative GPA in the program of study, as well as in the overall GPA. Individual departments may identify specific courses within the program of study for which a minimum grade of $B$ is required.

## Nonacademic Discipline

## Departmental Nonacademic Prohation and Dismissal Policy Procedures*

In addition to the university-wide requirements for academic standing, academic departments may establish additional requirements (e.g., ethical/professional standards), violation of which might determine an individual graduate student's standing with regard to probation and dismissal from a graduate program.

To this end, departments with such requirements must put these in writing and place them on file in the departmental office and the Graduate College.

Departments must make all'reasonable efforts to inform graduate students of the existence of such policies/standards and disseminate them to students upon their admission to graduate study in the program/area.

Subsequent changes in policies/standards must be communicated by the department to each student in the program and to the Dean of the Graduate College. The new regulations will not apply retroactively to the disadvantage of students already in the program.

Departments must provide information to students which outlines: required courses applicable to the various departmental programs of study, examination procedures and other formal evaluations, departmental policies with regard to awarding and renewing assistantships, time limits on programs of study (if less than seven years), registration policies, grade point requirements, requirements for changing from one degree program to another within the department, and other matters as are appropriate. The nature of the departmental advisory system should also be explained to incoming students.

## I. Departmental Nonacademic Probation:

If a student is failing to meet departmental nonacademic standards and probation or suspension is being considered, the department must:
a. warn the student of this in writing and specify in what way(s) the student is failing to meet the departmental standard(s);
b. advise the student (in writing) of the consequence(s) of failure to address the problem(s) cited, satisfactorily.
c. provide the student with a reasonable amount of time (e.g., a minimum of ten school days) within which to respond to the notification (e.g., the right to review) and indicate to the person(s) to whom a response should be made;
d. provide the student with a reasonable amount of time to meet the standards or remediate prior to being placed on departmental probation and suspension.
If a student is to be placed on departmental probation, the department must:
a. provide, at the time of its imposition, a written explanation of this status, and its time limits;
b. indicate the impact of departmental probation on the pursur of future graduate course work in the program of study;
c. give the student a reasonable amount of time within whichto respond to the notification of probation (e.g., right to review) and indicate to whom a response should be made;
d. provide an explanation of the departmental reinstatemet procedure(s);
e. establish departmental procedures for handling reviews.

The department should also notify the Dean of the Graduat
College and the Registrar in writing and indicate the impact of the student's nonacademic probationary status on the pursuit of futur' graduate course work in the program of study. The Dean of the Graduate College and the Registrar should be notified when the student has been removed from probation.

## II. Departmental Dismissal:

A student may be dismissed for her/his failure to meet: the conditions of admission, conditions of departmental probation, pre-and nounced departmental grade point requirements or other standard If a student is dismissed from a graduate program, the departmed must:
a. notify the student of this in writing, specify what the studen has done to merit departmental dismissal and its time limits;
b. indicate the impact of departmental dismissal on the pursuit of future course work in the program of study;
c. give student a reasonable amount of time (e.g., a minimurd of ten school days) to respond to the notification of dismissed (e.g., right to review) and indicate to the person(s) to whom a response should be made;
d. provide an explanation of departmental reinstatement procey dures (as appropriate).
The department should notify the Dean of the Graduate Cola lege and the Registrar in writing and indicate the impact of the student's nonacademic dismissal on the pursuit of graduate course work in the program of study. The Dean and the Registrar should be notified when the student's dismissal has been removed.

Departmental policies/procedures for nonacademic probatio and dismissal must be approved by the Graduate Dean and offered fair and expeditious review.

## III. Graduate College Review of Departmental Dismissal:

In addition to departmental sanctions, the Graduate Colle: will issue a warning to non-degree students with more than 7 credil hours attempted and 1 or 2 grade points deficient of a 3.00 GPA . Students who have attempted over 7 credit hours with 3 or more grad points deficient of a 3.00 GPA will automatically be suspended (se page 139 for reinstatement procedures). If, however, the student feels there has been unfairness or some procedural irregularity concerri] ing probation or dismissal, the student may request a review by the Graduate College. This review may be conducted by the Dean of that Graduate College (or his designee).
*This policy does not preclude enforcement of any other university polif cies (e.g., policies regarding the academic standing of graduate student academic ethics policies, grievance procedures for graduate students and graduate assistants).

## Enrollment and Registration Procedures

## Regulations Affecting Registration

Each student admitted to Degree Status or Non-Degree Status is assigned an advisor. The advisor will assist the student in the registration process involving the selection of courses and other matters such as:

1. Maximum academic load. The maximum graduate student load during each semester of the academic year is 15 hours.

The maximum graduate student load during the eight-week summer session is 9 semester hours - a maximum of 6 semester hours during one four-week period and 3 semester hours during the other four-week period; or three, 3 -semester-hour courses during an eight-week period. The maximum load during a two-week post-session is 2 semester hours.

Exceptions to these load regulations must be submitted in writing on a Student Request form, receive departmental approval, and may be granted only by the Dean of the Graduate College.
2. Level of courses. Graduate students normally take courses in the $100(\mathrm{~g})$ series and 200 series. A graduate student may take courses in the 100 series (without " g ") or below for undergraduate credit, but such courses do not carry graduate credit. However, all courses graduate or undergraduate, taken as a graduate student, count in determining the cumulative grade point average, except approved non-graded graduate course work.
3. Credit from other institutions. Graduate credit from other accredited institutions may be accepted to a maximum of one-third of the number of hours required by a particular UNI thesis or non-thesis master's degree program. Students pursuing a graduate degree program should discuss their plans to transfer credits with their program advisors as soon as possible. Credits earned from other institutions will not satisfy the minimum 200-level course requirement. (See regulations related to transfer credits on pages 176, 179, and 182.)
4. Continuous registration. Graduate students who have completed all of their program but not all of their graduation requirements, e.g. comprehensive exams, thesis, paper/project, recitals, etc., must be continuously registered until the degree is completed. Students reaching this stage will be automatically registered in the course 010:001, section 32, "Continuous Graduate Student", and assessed a $\$ 50$ fee. Continuous enrollment insures that students can access their university email accounts and utilize the library and its services through graduation.

## Schedule of Fees

See page 18.

## Waiver of Regulations

Exceptions to Graduate College regulations may be granted by the Dean of the Graduate College. Requests for exceptions must be submitted in writing on a Student Request form, and receive departmental approval before submission to the Dean of the Graduate College for final decision.

## Health

Graduate applicants for admission to UNI are not required to file a report of a physical examination or medical history. However, the university does require documentation of measles (rubeola) immunization by all students. Documentation of additional tests are required for international students (contact International Programs). Instructions for complying with this requirement will be sent to each student upon admission. In the interest of providing optimum health care, University Health Services recommends that incoming students who have physical
disabilities or health concerns provide the Health Clinic with information concerning their situation. (See page 26 for services available through University Health Services.)

## Veterans

The university cooperates with the Veterans Administration in providing for the education of veterans under the provision of federal laws. Dependents of veterans or of those persons who may be classified as prisoners of war or missing in action may also receive financial assistance from the Veterans Administration. The VA Clerk in the Office of the Registrar will assist students eligible under any of these laws and provide the required reports. Subsistence will depend upon the number of course hours for which the student enrolls. Questions should be referred to the VA Clerk in the Office of the Registrar.

## Financial Aid Office

Qualified degree-seeking students may secure loans from either Perkins (formerly National Direct Student Loan or NDSL), or William D. Ford Federal Direct Loan. Loans are available to students enrolled at least half-time ( 5 semester hours in the fall or spring semesters or 4 semester hours in the summer).

A limited number of opportunities for part-time employment are available on the campus for students attending University of Northern lowa at least half-time. On-campus positions pay a minimum of $\$ 5.65$ per hour.

Graduate students who wish further information about financial assistance may contact the Financial Aid Office, 255 Gilchrist Hall, University of Northern Iowa, Cedar Falls, IA 50614-0024. See pages 19-22.

## Student Life

See pages 24-28.

## University Facilities and Educational Services

See pages 29-36.

## Fine and Performing Arts at UNI

See pages 37-40.

## Graduate Assistantships

Graduate assistantships are available to qualified students who are working toward a graduate degree at the University of Northern Iowa. They may only be held by full-time students who are in residence during the time of the assistantship appointment. The associated work assignment is of an academic nature and designed to contribute to the student's graduate education. Service-related assignments termed intern assistantships are also available.

A full assistantship carries a stipend paid in equal installments over a 10 -month period. One semester and half-assistantship stipends may also be awarded. The associated work assignment will not exceed 20 hours per week assisting designated professors in certain appropriate academic functions, including teaching and research. Intern assistantships are available in a few non-academic departments.

A graduate student receiving an assistantship stipend may also receive other forms of university-based financial aid, tuition awards, fellowships or scholarships, as long as the latter do not require services performed by the student, i.e., where such could be considered wages. However, a student receiving an assistantship stipend cannot be other-
wise employed on campus, except as an hourly student employee outside of the department or area of the assistantship.

To be eligible, a graduate student should have a minimum 3.00 GPA. Once the student has begun studies at the University of Northern lowa, GPA eligibility will be based upon courses within the program of study. In absence of a program of study, all graduate courses will be used as a basis of computation for GPA eligibility. A graduate student receiving an assistantship stipend must be enrolled full-time ( $9+$ graduate hours to a maximum of 15 hours per semester) in courses listed on the approved Program of Study form. The Application for Program Approval (GF1) must be completed during the student's first semester of attendance as a graduate degree student and submitted to the Graduate College by November 15 for the fall semester and April 15 for the spring semester.

Stipend application forms may be obtained from the department in which the student is applying for an assistantship. Applications should be filed by Feliruary 1 with the department.

Recommendations for awarding assistantship stipends are made by the department head to the dean of the given college who selects those to be recommended to the Graduate College. Graduate assistantship stipends are awarded through the Graduate College.

## Graduate Scholarships

Graduate College tuition scholarships are awarded through the Graduate College upon recommendation of both the department head and college dean. To be eligible, a graduate student must have Degree Status and should have a minimum 3.00 GPA. Once the student has begun studies at the University of Northern lowa, GPA eligibility will be based upon courses within the program of study. In absence of a program of study, all graduate courses will be used as a basis of computation for GPA eligibility. A graduate student receiving a tuition scholarship must be enrolled full-time ( $9+$ graduate hours to a maximum of 15 hours per semester). The Application for Program Approval (GF1) must be completed during the student's first semester of attendance as a graduate degree student and submitted to the Graduate College by November 15 for the fall semester and April 15 for the spring semester. Full or half tuition scholarships are available.

Scholarship application forms may be obtained from the department office in which the student is applying for a scholarship. Applications should be filed by February 1 with the department.

The Graduate College also administers the campus activities involved in several scholarship competitions, such as Fulbright, Rhodes, and Marshall, which support graduate study abroad. Interested students are encouraged to inquire about these programs of support in their junior or senior year of college or as early in their graduate programs as possible.

Some university departments offer scholarships for graduate study. Students should obtain information about these awards from the departments in which they intend to do graduate work.

## Master's Degree Programs

## Common Regulations and Requirements

## Application for Program Approval

Academic departments have established procedures for advising and monitoring students. A student must be unconditionally admitted to graduate degree status prior to the submission of an Application for

Program Approval (GF-1). Student must have a cumulative grade point average of at least 3.00 for courses taken as a graduate student.

A departmental representative (e.g., advisor), or committee meets with the student to inform her/him of program requirements and expectations. Under advisement, the student's program of study will be planned and an Application for Program Approval (GF-1) completel This interview is usually conducted during the first semester in whicha student is enrolled in a degree program.

At the departmental interview, the student's program of study will be planned and an Application for Program Approval (GF-1) completel This form must indicate how all requirements for the master's degree will be met. The thesis or non-thesis option should be designated.

The GF-1 must be signed by the student and receive departmen approvals before submission for final approval in the Graduate $\mathrm{Col}_{1}$ lege. Some departments require the submission of completed GFelectronically. Students should check with their academic departmen for procedures related to the electronic submission of their GF-1s. No more than 15 semester hours of credit completed before this interview is conducted can be applied toward the degree being sought. This includes transfer and correspondence (specified as "Guided Independent Study" at UNI) course work as well as credit earned as a senior. The Dean of the Graduate College may: approve the Application For Program Approval form at once (and then notify the student); delay action until additional data is available; or return it to the department with comments. The Dean of the Graduate College is in general charge of each graduate student's program.

Graduate level transfer courses taken prior to degree admission are eligible for application to degree requirements if official transcripts were filed at the time of admission to graduate study. Transfed courses taken after degree admission will not be processed for inclusioul in the program of study until official transcripts are filed with the Offica of the Registrar. Approval of transfer course work assumes the Office of the Registrar has received an official graduate transcript indicating that the course work was graduate level; meets the recency requirement; and grade(s) received are B- or above. Academic departments are not obliged to count toward their degree programs any credit for course work undery taken without specific advice provided by the department, either througl an advisor assigned to the student prior to the formal interview or in the course of the interview itself. (In addition to departmental assessment, all transfer courses must satisfy criteria established by the Graduate Cound cil.)

The Making Up of Incomplete Work. Work reported as Incompleat (I) in the fall session for graduate students must be completed by June 1 the next calendar year. Work reported Incomplete in the spring and summer sessions must be completed by January 1 the next calendar year. The exact length of time to remove the Incomplete within the abovt guidelines, is set by agreement between the instructor and the studen, If the work reported as Incomplete is not made up by the deadline noted above, it is automatically entered as an $F$ (Failure) on the student's recorl

Any requests for an exception to the above guidelines for graduat students must be submitted in writing on a Student Request form, signe by the department head and approved by the Graduate College (see page 57). Only under the most unusual circumstances would requests for additional time be approved.

Some courses continue beyond the normal ending date of the semester or session. In such cases the initial grade reported will be an RC which means Research or Course Continued. Once the extended instruel tional period is finished the RC grade will be replaced with the appropr ate grade assigned by the instructor. (See page 57. .)

Thesis Committee. For students following the thesis option, it is recommended that their committee members be identified upon submi sion of their GF- 1 to the Graduate College for approval. The committ
usually consists of the student's advisor as chairperson and two additional graduate faculty members. The committee assists the student in further defining the student's course work, in supervising her/his research and writing, and eventually accepts or rejects the thesis.

The nature of the thesis is described on page 144.
Selection of Thesis Topic. The student following the thesis plan of study is urged to make at least a tentative selection of a topic by the end of her/his first semester. The delineation of an exact topic is not necessary before completing an Application for Program Approval form.

## Graduation Requirements

## Thesis Plan

1. The number of hours of graduate credit required varies with the major. A minimum of 30 semester hours of graduate credit is required for all majors. For the Master of Arts (M.A.), the Master of Arts in Education (M.A.E.), and the Master of Music (M.M.), a minimum of 24 semester hours must be in course work other than xxx:299 Research and xox:29R Directed Research. For the Master of Science (M.S.) degree, a minimum of 21 semester hours must be in course work other than xoxx:299 Research and xxx:29R Directed Research. The remainder of the 30 semester hours will be xcx:299 thesis research credit. See pages $146-175$ for program descriptions.
2. 200 -level credits: A minimum of 9 semester hours of 200 -level credit, other than xox:299 Research and xxx:29R Directed Research, taken at the University of Northern Iowa is required. A minimum of 6 semester hours of xox:299 and a maximum of 9 semester hours of xox:29R taken at the University of Northern Iowa can be applied to the requirements for the degree.
3. Completion of the course requirements for a specific major and any additional courses designated by the departmental committee.
4. Meet the recency of credit requirement.
5. Complete a thesis and meet thesis submission deadlines. Students receiving the Master of Music (M.M.) degree will be required to complete a final project as required by the department.
6. Residency requirement: At least 20 semester hours must be earned at the University of Northern Iowa; 6 semester hours must be earned in a single semester or summer session, after admission to dagree status.
7. Core requirements.

Master of Arts in Education
200:214 Foundations of Instructional Psychology - 3 hrs. or
260:234 Philosophy of Education - 3 hrs .
250:205 Educational Research - 3 hrs.
Master of Arts
Professional Core A or Professional Core B required only by certain majors
Master of Music
No core required.
Master of Science
No core required.

## Non-Thesis Plan

1. The number of hours of graduate credit required varies with the major. A minimum of 30 semester hours of graduate credit is required for all majors. For the Master of Accounting (MAcc), the Master of Arts (M.A.), the Master of Arts in Education (M.A.E.), the Master of Business Administration (M.B.A.), the Master of Music (M.M.), the Master of Public Policy (M.P.P.), the Master of Science (M.S.), the Master of Social Work (M.S.W.), a minimum of 27 semester hours
must be in course work other than xxx:299 Research and xox:29R Directed Research. See pages 146-175 for program descriptions.
2. 200 -level credits: A minimum of 12 semester hours of 200 -level credit, taken at the University of Northern Iowa is required. No more than 3 semester hours of xox: 299 can be applied to the requirements for the degree. xax: 29 R cannot be applied to the required minimum hours of 200 -level as determined by each program.
3. Completion of course requirements for a specific major and any additional courses designated by the departmental committee.
4. Meet the recency of credit requirement.
5. Complete at least one research paper, approved by the department and filed in the departmental office. The research paper must be read and approved by a committee of at least two members of the graduate faculty, presented in a format acceptable for publication and permanently filed in the departmental office.
6. Residency requirement: At least 20 semester hours must be earned at the University of Northern lowa; 6 semester hours must be earned in a single semester or summer session, after admission to degree status.
7. Core Requirements:

Master of Accounting
No core required.
Master of Arts in Education
200:214 Foundations of Instructional Psychology - 3 hrs.
or
260:234 Philosophy of Education - 3 hrs.
250:205 Educational Research - 3 hrs .
Master of Arts
Professional Core A or Professional Core B -
Required only by certain majors.
Master of Business Administration
No core required.
Master of Music
No core required.
Master of Public Policy
No core required.
Master of Science
No core required.
Master of Social Work
No core required.

## Professional Core A

(prerequisite: teacher licensure or equivalent) 200:214 Foundations of Instructional Psychology - 3 hrs. or
260:234 Philosophy of Education - 3 hrs.
250:205 Educational Research or a departmental course in Research and Bibliography
A course in curriculum or methods of instruction in the major field or any additional course numbered 200 from courses in the 200:xxx through 290:xxx series.

## Professional Core B

Effective July 1, 2003, individuals teaching in lowa community colleges are no longer required to hold state issued teaching licenses. Completion of Professional Core B with an appropriate distribution of courses in one or more subject areas may be highly recommended for teaching at a community college. Contact individual colleges to determine minimum requirements for employment at that institution.
Required:
State approved Human Relations course (e.g., 280:170g, 3 hrs.)
170:230 Postsecondary Curriculum and Assessment - 3 hrs .
170:250 Teaching in College - 3 hrs.

170:256 The Two Year College - 3 hrs. :297 Practicum - 3 hrs . (required for those without teaching experience)

## Other Requirements and Criteria

1. Scholarship. A cumulative grade index of 3.00 (" $B$ " average) must be earned in all courses attempted as a graduate student within the program of study. No more than 6 semester hours of " $\mathrm{C}+$ ", " C ", "C-" credit earned within the program of study may be applied toward credit for graduation.
2. Recency of credit. Courses taken more than seven years prior to the granting of the degree cannot be used to meet degree requirements.
3. Nongraded credit. Up to 3 credit hours of graduate nongraded course work may be applied within the program of study. Exceptions are practica, internships, 299/399 Research and xxx:29R Directed Research.
4. Program approval. The requirements for program approval are described on pages 142-143.
5. Transfer of credit from other institutions. Graduate credit earned at regionally accredited colleges and universities may be accepted to a maximum of one-third of the number of graded hours required by a particular UNI thesis or non-thesis master's degree program. Students in any graduate degree program should discuss their plans to transfer credits with their program advisors during the first semester of their degree programs (see pages 142-143, "Application for Program Approval"). Transfer courses will not be used to satisfy the $\mathbf{2 0 0}$-level course requirement. (In addition to departmental assessment, all transfer courses'must satisfy criteria established by the Graduate Council.)
6. Correspondence credit. Correspondence (specified as "Guided Independent Study" at UNI) courses may not ordinarily be applied toward a graduate degree program. In unusual circumstances a student may request that a maximum of 3 semester hours of 100 g -level correspondence/UNI "Guided Independent Study" credit be applied to a graduate degree program. The request must be submitted to the Dean of the Graduate College prior to registering for the course.
7. Workshop credit. No more than 6 credit hours earned in workshop courses, at the University of Northern Iowa or another institution, will be applied toward a graduate degree.
8. Examinations. Master's degree students on either the thesis or nonthesis plan may be required to pass a comprehensive examination over a specific body of knowledge as prepared and administered by each department at the end of the student's program of study.
9. Research credit. Registration for xacx:299 Research will not be accepted until the student has submitted a statement or outline of the proposed research project and has secured the approval of the person directing the research project and the head of the appropriate department. A copy of the completed research report, approved by the director of the research project and the department head, should be filed in the departmental office.

Research carries residence credit and may be pursued either on or off campus, but not in an extension class. There is no prerequisite, although it is strongly recommended that 250:205 Educational Research or a departmental course in research be completed before registering for Research.
10. Residence. At least two-thirds of the minimum hours required for a particular thesis or non-thesis master's degree program must be taken with members of the UNI faculty and must include 6 or more hours in one semester or summer session. The specialist and doctoral degree programs each have different residence requirements. For a particular degree program's requirements, see its regulations
given in this catalog. As soon as possible, each student in a degre program should discuss her/his residence credit plan with her/h program advisor in her/his degree department.

After a student has been admitted for the master's degree, and provided that prior arrangements have been made with the Dead of the Graduate College, $s(h e)$ may take work at the University of Iowa, Iowa State University or the Quad-Cities Graduate Study, Center, for which residence credit may be given at the University of Northern Iowa.
11. Continuous registration. Graduate students who have completed all of their program but not all of their graduation requirements e.g. comprehensive exams, thesis, paper/project, recitals, etc., must be continuously registered until the degree is completed. Student reaching this stage will be automatically registered in the course 010:001, section 32, "Continuous Graduate Student", and assessed a $\$ 50$ fee. Continuous enrollment insures that students can access their university email accounts and utilize the library and its service. through graduation.
12. Thesis. A thesis is required of all students who choose the thesis option. Because the thesis is considered to serve a functional need, no attempt is made to limit the topics considered acceptable. The thesis is to be prepared and submitted in accordance with the most current edition of the Thesis and Dissertation Manual.

The thesis may take the form of studies, experiments, survey4 compositions, creative work and projects, and may concern itsel with such matters as methodology, understanding children, and materials of instruction, or may delve rather deeply into some aspect of a specialized academic field. Whatever the nature of the subject its development into an acceptable thesis is considered to contributb to the growth of such attributes as maturity of judgment, initiativel writing ability, and organizational ability. While the thesis may make no significant contribution to the world's knowledge, its preparatiof should develop in the writer a broader understanding of the world knowledge and a more genuine appreciation of the research efforth of others.

The total number of credit hours of research permitted for thesis work will vary with the program. Master's theses (M.A., M.A.E include a 6-9 hour thesis credit requirement. The M.S. thesis optio, requires a maximum of 9 credit hours of research in the program of study. The specialist and doctoral programs may have different research hour requirements. However, in all cases, to earn thesis credil the student registers for the appropriate numbered course (xxx:299) xxx:399), not more than 6 hours in any semester. The instructol may assign an " $R C^{\prime}$ " for Research Continued, if $s(h e)$ feels the worltr has not reached the stage where it can be evaluated. Registration for the last segment of research credit for which a student registers (for work on her/his thesis) should be postponed until the thesis is near completion. The Registrar may authorize the extension of time for the completion of a Research Continued ( $R C$ ) in Research up to one additional calendar year with consent of instructor. If at the end of that time the work has not been completed, the $R C$ will be changal to an $F$ (Failure).

All students must have a formal oral defense of their thesis before a committee composed of at least three graduate facult, Completion of the thesis project occurs when the student's commid tee and the Dean of the Graduate College have approved the thesisy The thesis must be presented for approval to the thesis committeo early enough in the semester to meet the Graduate College deadlind for final submission (see "14. Filing of Thesis").
13. Thesis preview. During the semester in which the student intend to graduate, the student must make an appointment with the Graduate College for a thesis preview to have the style and formal
of the thesis reviewed. All problems may not be detected during the preview, however, the major difficulties will be discussed. Often a brief consultation will uncover format problems that are easily remedied at this stage. No thesis will be accepted by the Graduate College for final approval without the completion of this meeting. The student must have an approved program of study (GF-1) on file in the Graduate College with the members of the thesis committee listed before a preview meeting will be scheduled. Academic departments must identify the students who should be scheduled for preview each semester. The preview must be scheduled and completed no later than eight weeks before the last day of the semester the student intends to graduate.
14. Filing of thesis. The student must present two copies of the thesis in final form, either originals or photocopies, to the Graduate College no later than six weeks before graduation. Failure to meet this deadline will result in a delay in graduation. The requirements for the preparation and filing of the thesis are set forth in the Thesis and Dissertation Manual. Copies of the manual may be obtained through the Graduate College office and should be consulted prior to beginning the thesis.

Final copies submitted to the Graduate College must be on white, acid free, 24 -pound, 25 percent or 100 percent cotton paper. The student may purchase the approved paper at the print centers in the Rod Library or the Physical Plant. The Rod Library Print Center is equipped to photocopy theses. The final copy must be clean and suitable for microfilming, with uniform darkness, and a sharp imprint.

When the thesis is submitted to the Graduate College, the student will present a receipt of payment for the cost of the thesis binding. This fee is paid at the University Office of Business Operations. The student will also indicate to the Office of the Graduate College the name and edition of the style manual used in preparing the thesis. Consult the Thesis and Dissertation Manual for the list of approved style manuals.
15. Filing of abstract of thesis. An abstract or summary of the thesis is required of all students following the thesis plan toward the master's degree. The abstract will be approximately 350 words in length and is submitted with the thesis. Three copies of the abstract must be filed in the Office of the Graduate College.
16. Application for graduation. A candidate for the master's degree must make application for graduation not later than the end of the ninth week of the semester or the fourth week of the summer session in which s(he) plans to receive the degree. The application form may be secured in the Office of the Registrar or the departmental offices.

## Summary of Hour Requirements

A summary of the hour requirements for both the thesis and the non-thesis plans is listed below. These are the minimum number of hours and should not be interpreted as a maximum number. Additional hours may be required by departments for individuals on specific programs or special objectives.

|  | Thesis | Non- <br> Thesis |
| :--- | :--- | :--- |
| Minimum graduate hours required <br> Minimum hours of credit at UNI | $30^{*}$ | $30^{* *}$ |
| Maximum usable hours combined in transfer <br> and correspondence~ credit | $20^{\wedge}$ | 20 |
| Maximum usable hours of correspondence credit <br> $\quad$ (requires Graduate College preapproval) | $30^{\wedge \wedge}$ | $10 \wedge \wedge$ |
| Maximum usable hours of workshop credit <br> Minimum hours required in courses numbered <br> 200 and above at UNI | 6 | 3 |

~correspondence courses at UNI are specified as "Guided Independent Study"
*Includes 6 to 9 hours for research (xxx:299), depending on the master's program.
${ }^{* *}$ Includes at least one research paper. Total hours depends on major chosen.
^Must include 6 or more hours in one semester or summer session.
$\wedge \wedge$ Up to one-third of the hours on the graduate program of study.
\#Includes no more than 6 hours research credit (xox:299) for thesis. Some departments have a higher minimum.
\#\#In some departments they may include no more than 3 hours of (xox: 299) Research.

## Second Master's Degree

A student may pursue a second master's degree at the University of Northern lowa upon completion of the first master=s degree or may pursue two separate master's degrees concurrently by meeting all requirements for the second degree. Only 8 semester hours of work from the first degree may be used for the second degree. All university graduation requirements including completion of 200 -level course work, separate master's project/thesis, comprehensives, and all other specific requirements shall be met for the second degree in addition to the first degree.

## Interdisciplinary Master's Degree

A student may pursue a master's degree with two majors or two emphasis areas by meeting all the requirements for the second major; 8 semester hours of work from the first major may be used for the second. The requirements for work at the University of Northern Iowa, 200-level work, and all other specific requirements shall be met for the second major, in addition to work completed for the first major. Common research project/thesis and comprehensives are permissible. For students completing one thesis for two majors, course work common to both majors would include 6 hours of xxx:299 research and two (2) additional hours. This would constitute the 8 semester hours of course work that may be common to both majors.

# Master of Accounting Degree 

The Master of Accounting program (MAcc) is offered on the nonthesis option. A minimum of 30 semester hours is required for the degree, of which a minimum of $\mathbf{1 5}$ hours must be at the $\mathbf{2 0 0}$-level. In addition, there can be no more than 9 credit hours of UNI g-level course included in the program of study and all transfer credit must be at the graduate level (i.e., equivalent to UNI's 200 -level courses). Research papers are required as an integral component of most graduate level courses.

Students desiring entry into this degree program must have: a minimum Graduate Management Admission Test (GMAT) score of 500 , a grade point average (GPA) of 3.00 or better on all upper division (junior/senior) accounting courses, and satisfactorily completed 120:129, 120:130, and 150:113. In addition, a minimum admission score of 1150 (computed by multiplying the undergraduate GPA by 200 and adding the GMAT score) is required. Students may be admitted on a probationary basis if their GMAT score and/or their average grades on upper division accounting courses fall below 500 and/or 3.00 , respectively.

Students from countries where the native language is not English are required to take the GMAT, the Test of English as a Foreign Language (TOEFL) and the Test of Spoken English (TSE). Applicants must earn a minimum score of 575 on the TOEFL (or 230 on the computerized TOEFL) and a score of 50 on the TSE to be considered/eligible for admission.

UNI undergraduate accounting students interested in the MAcc Integrated Program may apply for admission to the program during the semester they are completing Intermediate Accounting II (120:130). An Application for Admission to Graduate Study must be completed and the student's interest in the MAcc Integrated Program must be indicated on the application itself. If accepted into the MAcc Integrated Program, the student will receive both the B.A. and MAcc degrees upon completion of the program.

Once admitted into the integrated program, UNI undergraduate accounting students (who are classified as seniors) and in the final semester of their senior year (or in the spring semester before their final semester in the summer or taking a graduate internship in a semester prior to their final semester), may register for graduate credit as a senior, with the approval of the department head (see guidelines on pages 61-62). The student must present a signed Student Request form (with the appropriate signatures), when registering for graduate credit as a senior. The combined total number of hours, both undergraduate and graduate, may not exceed 15 hours in a semester, or 8 hours in a summer session. Graduate work completed on the early admission basis will be counted as graduate credit only if the student actually earns the bachelor's degree within two years from the time the student took the course and will not be counted toward the undergraduate degree.

Required:

Accounting Research: 120:214 or 120:243............................. 3 hour
Accounting electives from the following .........ano............................ 9 hours
Must have 6 hours of 200 -level.
120:135; 120:139; 120:141; 120:236; 120:240; 120:242;
120:263; 120:269; 120:280; 120:285; 120:289; 120:299;
120:214 or 120:243 (if not already taken) or other
accounting courses approved by the Department of
Accounting.
Communication component from the following 3 hour
Management: 150:114; 150:280 (communications topic).
Communication: 48C:134; 48C:141; 48C:151; 48C:153.
Any other non-accounting courses approved by Department of Accounting.
Information Technology component from the following $\qquad$ 3 hour
Accounting: 120:236 (may still have 9 hours of accounting electives).
Management: 150:249.
Any other non-accounting course approved by Department of Accounting.
International Business component from the following. 3 hours
Marketing: 130:177.
Finance: 160:158.
Economics: 920:136; 920:175.
Any other non-accounting course approved by Department of Accounting.
This requirement is met if the student holds an International Business Certificate. If the student has a minor in a foreign language, the program coordinator will determine if this requirement has been met. If this component is waived, an additional 3 hours of electives will be required.
Electives:
Economics: 920:135.
Any 200-level, non-accounting College of Business course. Any non-accounting component course listed above.
For those interested in the government/nonprofit sector:
Economics: 920:117; 920:125; 920;148.
Political Science: 942:153; 942:172; 942:173; 942:174. History: 960:225.
Any non-accounting course approved by Department of Accounting.

Students will be required to satisfy an Experiential Componed with a pre-approved experience. Ways in which this component migl be satisfied include enrollment and satisfactory completion of $120: 14$ or 120:144 or 120:169 or 120:179 or 120:269. Non-academic credit worl experience may also satisfy this requirement. Students will be require to prepare a written report summarizing their experience. Supervisin faculty will determine whether the experience goals have been satisfied

## Master of Arts Degree

A number of curricula lead to the degree of Master of Arts. Programs are available for advanced preparation of elementary and secondary teachers, for college teaching, and for graduate study without reference to teaching. The following majors are offered:

## Art

Biology
Chemistry
Communication Studies
Computer Science Education
Curriculum and Instruction:
Instructional Technology
English
French
Geography
German
Health Education
History
Leisure, Youth and Human
Services
Leisure Services Management Emphasis
Youth and Human Service
Administration Emphasis
Mathematics
Mathematics for the Middle Grades (4-8)

Mental Health Counseling
Music
Performance and Training Technology
Physical Education
Physics Education
Psychology
School Library Media Studies
Science Education
Science Education for Elementary
Schools (K-6)
Sociology
Spanish
Speech-Language Pathology
Teaching English to Speakers of Other Languages (TESOL)
Technology
TESOL/Modern Languages
Two Languages: French/German, Spanish/French, German/ Spanish
Women's Studies

The Master of Arts program is a highly flexible one. The plan of study prescribed for each student depends upon the student's undergraduate preparation, experience, and future plans. The needs of the student, as determined by the student and her/his advisor and departmental committee, are the guiding factors in course selection. It should be stressed, however, that regardless of the plan of study followed, graduate work leading to the degree of Master of Arts should constitute a cohesive, logically planned program, not merely an accumulation of credit in a variety of courses. On most programs both the thesis and the non-thesis plans are available.

On each curriculum and for each major, the student who plans to receive the master's degree must meet the graduate requirements described on pages 143-145.

## Major in Art

This major is available on the thesis option only. Each student, regardless of emphasis, must complete a minimum of 30 semester hours of credit including the following common core. A minimum of 15 semester hours of $\mathbf{2 0 0}$-level course work is required for the thesis option.

The Graduate Record Examination (General Test) is not required for admission to the program for studio/thesis option.

Graduate Record Examination (GRE) scores are required for the thesis option/Art Education emphasis. The Miller Analogy test or a research or project of merit may substitute in lieu of the GRE.

Successful completion of a final oral comprehensive examination is required.

Required core:
Art: 600:280............................................................................ 4 hours

Emphasis area ....................................................................... 14 hours
Research: 600:299. 6 hours

Beyond this required core, individualized programs of study are carefully planned and approved in consultation with a graduate advisor.

Two emphases are offered: Art Education and Studio.
Qualified applicants are admitted by the Graduate Faculty Admission Committee following selective review of all prior academic and creative achievement. A review of the applicant's undergraduate course work and portfolio is the basis for admission to the graduate program. The Chair of Graduate Studies in the Department of Art should be contacted for specific information regarding the preparation of the applicant's portfolio.

As a general rule, students who have received an undergraduate degree in art will be admitted to the program without additional course requirements. Additional course work may be required of those applicants who meet all other admission criteria but did not complete an undergraduate degree in art. Credit for additional work may not apply toward the degree program.

## Art Education Emphasis

In addition to the common core, students may elect one of four possible directions: improvement as a teacher; research in art education; submission of an original program proposal; and teaching licensure for Iowa community colleges. Students whose emphasis is Art Education must elect the thesis option.

## Studio Emphasis

In addition to the common core, students may elect specialization in any one of the following studio areas: ceramics, drawing, graphic design, jewelry/metals, photography, painting, printmaking, or sculpture. The degree program is flexible to allow maximum focus upon a specific studio area and/or supportive studio work in several or combined areas.

Two program options are available: thesis or studio thesis.
The studio thesis, a creative thesis unique to the Department of Art, is highly recommended for those students who wish to consider additional professional study beyond the master's level. It requires the public presentation of a formal exhibition, performance or project including an announcement, together with a formal documentation of that presentation for submission to the Dean of the Graduate College.

Election of the thesis option should be considered only by those students whose studio specialization involves the testing or documentation of highly innovative and technical studio-related procedures.

Guidelines, procedures, and requirements for each emphasis and program option are available from the Head of the Department of Art.

All degree candidates are required to pass a formal Comprehensive Review in partial fulfillment of the Master of Arts degree requirements.

## Major in Biology

Students interested in enrolling in the program must complete an application and be admitted to the program. Applications should include three recommendations, and transcripts of undergraduate and graduate credits. Results of the GRE in the subject area of Biology are required for all students who have not completed a biology degree at UNI.

Successful completion of a final written comprehensive examination is required.

This major is available on the non-thesis option only. A minimum of 36 semester hours is required, including a 3 -credit-hour research paper. A minimum of $\mathbf{1 5}$ semester hours of $\mathbf{2 0 0}$-level course work is required. This program is flexible and designed to allow students, working with their advisory committee, to tailor a program to fit student interests and aspirations in biology.

Required courses:

Biology: 840:202 ..................................................................... 4 hours
Biology: 840:292 ................................................................................. 1 hour
Research: 840:299........................................................................ 3 hours
Electives: ( 100 g or above) ............................................................. 12 hours
36 hours
Content areas:
I. 840:240 Advanced Cellular and Molecular Biology
II. 840:250 Advanced Physiology and Development
III. 840:260 Advanced Ecology
IV. 840:270 Advanced Systematics and Evolutionary Biology

## Major in Chemistry

This major is available as a non-thesis plan for students interested in careers in secondary and community college education. The Chemistry Department offers students a friendly environment featuring regular interaction with their faculty mentors. Students interested in the program must submit a complete application, three letters of recommendation, and transcripts of undergraduate and graduate credits to the Chemistry Department.

The Graduate Record Examination (General Test) is not required for admission to the program.

A minimum of 30 semester credit hours is required for this degree. A minimum of $\mathbf{1 5}$ semester hours of $\mathbf{2 0 0}$-level course work is required. Specialization is available in the areas of analytical chemistry, biochemistry, chemical education, inorganic chemistry, organic chemistry, and physical chemistry; students generally select a faculty mentor during their first semester of study. Students must submit a research paper.

Successful completion of a final written comprehensive examination is required.

Required:
Science: 820:200............................................................................... 2 hours

Chemistry: 860:299.................................................................. 3 hours
Electives (including at least 7 additional hours of 200 -level
course work in chemistry).................................................... 22 hours
30 hours

## Major in Commumication Studies

A student may seek a General Communication program or specialize in Communication Education, Mass Communication, Organizational Communication, Performance Studies, or Public Relations. The major is available on the thesis and non-thesis options. A minimum of 30 semester hours for the thesis option and 32 hours for the non-thesis option are required. A minimum of $\mathbf{1 5}$ semester hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of 12 semester hours of $\mathbf{2 0 0}$-level course work is required for the non-thesis option.

The Graduate Record Examination (General Test) is not required for admission to the program.

Successful completion of a final written comprehensive examination is required for both the thesis and non-thesis options.

Detailed information on the major, including directions for procedures to follow in planning a program and requesting assignment of an advisor, may be obtained from the Head of the Department of Communication Studies or the Director of Graduate Studies.

## Required:

Communication Studies:


Thesis ( 6 hrs .)
Non-thesis (0-3 hrs.)
Electives to include one of the following emphasis areas
(courses must be specific to the department or cognate area and be approved by department)
.15-25 houm
30-32 hour

## Communication Education Emphasis

Communication Studies: 48C:122 (non-thesis only); 48C:282.

## General Communication Emphasis

Communication Studies: 48C/48E/48P.

## Mass Communication Emphasis

Communication Studies: 48E:222; 48E:224.

## Organizational Communication Emphasis

Communication Studies: 48C:232; 48C:282.
Outside Component.

## Performance Studies Emphasis

Communication Studies: 48C:212. Cognate area.

## Public Relations Emphasis

Communication Studies: 48P:184; 48P:282.
Of the $\mathbf{3 0 - 3 2}$ hours required:
9 hours of 200 -level courses (excluding $48 \mathrm{x}: 299$ ) for the thesis option
12 hours of 200 -level courses (including no more than 3 hours of 48x:299 for the non-thesis option)
20 hours of course work in Communication Studies (no more than 10 hours outside the department and/or by transfer).
No more than 6 hours of independent work: "readings," "projecter, or specialized individual instruction.
No more than 3 hours of workshop credit.
Successful completion of comprehensive exams after completiont ol 22 hours of course work.
Successful completion of a research paper or thesis (see page 144),

## Program Certificate

For information on the following program certificate, see page 135 or contact the Department of Communication Studies.

## Graduate Certificate in Corporate Communication

## Major in Computer Science Education

This program is designed for students who are primarily interest in educationally-related professional careers in computer science. Arem of specialization include teaching and curriculum, artificial intelligen and expert systems, software design and methodology, informatic storage and retrieval, and programming systems. This program has two emphases. One is for those wishing to apply educational expertise direct to computer science, ie., teaching computer science at the secondary lev?
or in 2-or 4-year colleges. The other more technical emphasis is for those desiring a strong background in advanced computer science that includes applying computer science broadly to education and related applications.

This major is available on the thesis and non-thesis options, and a minimum of 33 semester hours is required. A student completing the thesis option must include 6 semester hours of 810:299 Research in the program of study. A minimum of $\mathbf{1 5}$ semester hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of 12 semester hours of 200-level course work is required for the non-thesis option.

The Graduate Record Examination (General Test) is required for admission to the program.

The teaching emphasis is designed to apply knowledge from education to the teaching of computer science. These students are expected to have a reasonable level of background in both computer science and education upon entry. Some preparatory work may be required of students with little or no background in either education or computer science. The program of study includes (about equally) computer science, education, and the teaching of computer science.

The technical emphasis is designed to apply computer science knowledge and ability to the development of sophisticated applications applicable to education, such as intelligent tutoring systems, multi-media applications, human-machine interaction, applications of virtual reality and graphics, hyper-text, automated library information access, and advanced interactive training systems. Bachelor's-level experience in computer science is suggested for program admission. For these majors, program study includes significant computer science course work and some computer science education course work.

Required:
Computer Science: 810:251; 810:253 or 810:255 ................... 6 hours
Additional courses in Computer Science ............................. 12 hours Electives from the following ( 6 hours 810:299 research required for the thesis option) $\qquad$ 15 hours
Courses in Computer Science (810:1 1xog or 810:2xx); 170:250; 200:214; $240: 205 ; 240: 240 ; 250: 205$; or other computer or instruction-related courses appropriate to student goals. 33 hours
Students in this program are exempt from general limitations on the number of hours of research credit. Any (thesis or non-thesis) M.A. Computer Science Education program of study may include 6 hours or more of $810: 299$ research credit. However, the number of hours greater than 6 hours must be in addition to the minimum 33 hours required for the degree.

## Major in Curriculum and Instruction: Instructional Technology

This major is designed to prepare educators for a variety of professional positions in educational settings, including: school building level, school district level, and alternative schools.

This major is available on both the thesis and non-thesis options, and requires a minimum of $35-44$ semester hours depending on the option chosen. A minimum of 15 semester hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of 12 semester hours of 200 -level course work is required for the non-thesis option.

The Graduate Record Examination (General Test) is not required for admission to the program.

All students completing the thesis option are required to pass an oral comprehensive examination prepared and administered by the thesis committee. This comprehensive examination will normally accompany
the thesis defense. A student completing the thesis option must include 6 hours of 240:299 in the program of study.

All students completing the non-thesis option are required to complete the Departmental Graduate Research Requirement and pass a written comprehensive examination prepared and administered by the department at the end of the student's program of study.

```
Required:
    Curriculum and Instruction: 210:201 ..................................... }3\mathrm{ hours
```



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    Instructional Technology: 240:131; 240:139; 240:232;
        240:237; 240:240; 240:289.
        ... }17\mathrm{ hours
```



```
        Thesis option (6 hours)
        Non-thesis option (2 hours)
Electives: Choose Option 1 or 2 below.
                .6-15 hours
    Option 1 (6 hours - thesis) (10 hours - non-thesis)
    Option 2(15 hours)
        35-44 hours
```


## Option 1

Electives:
Educational Psychology: 200:214.
Measurement and Research: 250:205.
Instructional Technology: 240:138; 240:140; 240:147; 240:150;
240:153; 240:170; 240:205; 240:210; 240:260; 240:270;
240:285; 240:286; 240:297.

## Option 2

Electives:
School Library Media Studies: 350:121; 350:132 or 350:134; 350:225; 350:250; 350:290.

## Major in English

The M.A. Major in English is available on the thesis and non-thesis options, and degree applicants choose one of three emphases (see below). The thesis option requires a minimum of $\mathbf{3 0 - 3 6}$ semester hours, depending on the emphasis chosen; the non-thesis option requires a minimum of 30-33 semester hours, depending on the emphasis chosen. A minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work is required for each option.

The Graduate Record Examination (General Test) is not required for admission to the program.

The three emphases are the following: (1) Literature Emphasis, minimum 30 semester hours - available on both thesis and non-thesis options; (2) Creative Writing Emphasis, minimum 36 semester hours - available on thesis option only; and (3) Teaching English in Secondary Schools-Middle/Junior High and Senior High (TESS), minimum 33 semester hours - available on non-thesis option only.

Graduate students are required to prepare a program of study which is subject to the approval of a faculty committee. The departmental committee may require an applicant to complete course work in addition to the minimum hours specified for the selected option and emphasis. Directions for preparing a program of study are available from the English Graduate Coordinator.

Successful completion of a final written and oral comprehensive examination is required for both the thesis and non-thesis options. In addition, students pursuing the non-thesis option are required to submit a Graduate Student Portfolio and complete an approved research paper. See the English Graduate Coordinator for details.

Native speakers of English must demonstrate proficiency in another language by earning at least a "C" grade in a second-semester, collegelevel course or by passing a specially designed examination. Course work
taken to satisfy this foreign language requirement does not count toward the number of hours required for completion of the degiee major.

For full admission, non-native English speakers must have achieved a Test of English as a Foreign Language (TOEFL) score of 600 (paperbased) $/ 250$ (computer-based), or the equivalent, in order to demonstrate their proficiency in English. A student may be required to take additional English language improvement courses at the discretion of the English Graduate Faculty. Work taken to satisfy the language proficiency requirement does not count toward the minimum of 30 to 36 semester hours required to complete the selected emphasis.

Effective July, 1, 2003, individuals teaching in lowa community colleges are no longer required to hold state issued teaching licenses. However, graduate course work in postsecondary education, such as the courses in the Professional Core B (pages 143-144), may strengthen one's qualifications for teaching at a community college. Contact individual colleges to determine the requirements for teaching appointments at each institution.

## Literature Emphasis:

Available on both the thesis and non-thesis option.
Required:
English Language and Literature: 620:201 ............................... 3 hours
Electives
27 hours
Planned with the student's advisor and subject to the approval of the departmental committee: must include 15 hours of 200 -level courses (including 6 hours of 620:299 required for thesis option; no more than 3 hours of 620:299 may be used for the non-thesis option)

30 hours

## Creative Writing Emphasis:

Available on the thesis option only.
Required:
English Language and Literature: 620:201 ............................ 3 hours
English Language and Literature: 620:108 and/or 620:109.

3-6 hours
English Language and Literature: 620:174 and/or 620:175 ... 9 hours

Electives (planned with student's advisor and subject to approval by the departmental committee):
Literature courses from English Language and Literature (must include 6 hours of 200-level courses) ......o.......9-12 hours
Literature, writing, or culture from a department other than English or a non-literature course from English

0-3 hours 36 hours

The required thesis shall consist of a collection of short stories, a novel, a collection of poems, or a book-length poem. Critical apparati - such as prologue, introduction, epilogue, notes, bibliography - are not required within the thesis. Both a formal oral defense of the thesis and a public reading of selected portions of the thesis are required.

## Teaching English in the Secondary Schools-Middle/ Junior High and Senior High (TESS) Emphasis: <br> Available on the non-thesis option only.

Teacher licensure is a prerequisite for completing the program approval process for this emphasis. Also prerequisite is the following undergraduate course work: one course in TESOL/Applied Linguistics; one course in advanced writing; two courses in British literature; one course
in American literature; one course in modern or ethnic literature; one course in young adult literature; one course in the teaching of writing and 620:190.

No more than 3 hours of prerequisite courses can be applied to the minimum hours required for this emphasis. Further deficiencies must be made up in addition to the required courses listed below. Students who have not taken all the prerequisite work should consult at once with the English Graduate Coordinator in order to plan appropriate course wort

Required:
Literacy Education: 230:117. $\qquad$ 3 houra
English Language and Literature: 620:168; 620:201; 620:207 or 620:291

9 hourt
English Language and Literature: 200-level literature seminars 9 hourt
TESOL/Applied Linguistics: 630:190; 630:143 or 630:156 or 630:192

6 hour
 33 hound *Students who have not completed 280:138 in English are required to take 620:297 for 1 hour. A student who has completed any of the requine courses at the undergraduate level may elect other departmental gradual level courses to complete the required minimum total of 33 hours.

## Major in French

The major in French is available on the thesis and non-thesis options; a minimum of 32 hours is required for either option. On the thesis option, a minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work, including 6 hours of Research 720:299, is required. On the non-thesis option, minimum of 12 hours of $\mathbf{2 0 0}$-level course work is required, including no more than 3 hours of 720:299. In the case of the non-thesis optiont research paper must be approved by the student's committee and filed with the Department of Modern Languages before the comprehensive examinations may be taken. Successful completion of a final written andil oral comprehensive examination is required for both the thesis and nonthesis options.

The Graduate Record Examination (General Test) is not require for admission to the program.

Required:
Research: 700:295
2 hour

Literature courses (minimum) 8 hour
Linguistics, grammar, and/or translation courses (minimum) 8 hour One course in civilization or culture (unless previously met) 3 hour Electives ( 6 hours 720:299 research required for thesis option).. 11 hour, 32 hour
The remainder of the program will be determined by the student needs in consultation with her/his advisor. No more than 6 semestel hours in translation or 6 hours in interpreting may be applied toward this major.

## Teaching Emphasis

This program is offered on the non-thesis option only. A minimut of 34 semester hours is required, of which a minimum of 16 hours must be at the $\mathbf{2 0 0}$-level; a minimum of 20 hours must represent course taught in French.

Successful completion of a final written and oral comprehensive examination is required. A research paper, written on an aspect of metho ology, must be approved by the student's M.A. committee and filed wit the Department of Modern Languages before comprehensive examirt tions may be taken.

Prerequisites: Student must hold a valid teaching license and have documentation of successful teaching experience. The student who has not completed 700:190, 720:101 and 720:103, or equivalents, before entering the program must add these courses to the requirements stated below.

Required:
Educational Psychology: 200:214..ono....................................... 3 hours
Measurement and Research: 250:205 or equivalent............... 3 hours French: Methods, one of which must be a methodological
topic in 720:226, 720:286 or 720:289 ................... 6 hours Linguistics, one of which must be at the 200-
level, and one language-specific ............................ 6 hours
Culture and civilization* ....................................................... 6 hours
Literature* ............................................................................... 6 hours
Electives in French .......................................................................... 4 hours 34 hours
*One of these courses must be at the 200 -level. Courses must be taught in French.

## Major in Geography

The major in Geography is available on the thesis and non-thesis options. A minimum of 32 semester hours, including 6 hours 970:299 for thesis research and writing, is required for the thesis option. Students must successfully present a written and oral thesis proposal prior to registration in 970:299. A minimum of 38 semester hours, including 3 hours 970:298 for completion of a research paper, is required for the non-thesis option. A minimum of 17 hours of $\mathbf{2 0 0}$-level course wark is required for both the thesis and non-thesis options.

The Graduate Record Examination (General Test) is not required for admission to the program.

Students interested in enrolling in the program should contact the graduate coordinator in the Department of Geography. Applications should include two letters of recommendation, a brief statement about professional interests and career objectives, and transcripts of both undergraduate and graduate credit.

## Thesis Option:

Required geography:

970:280; 970:294 ...................................................................... 6 hours
970:299 ................................................................................... 6 hours
Electives 18 hours
(At least 12 of the 18 hours must be in geography; at least 3 of the $\mathbf{1 8}$ hours must be at the 200 -level; cannot include 970:298; additional hours of $970: 299$ cannot count toward the minimum 18 elective hours)

## Non-Thesis Option:

Required geography:

970:280; 970:294; 970:298 ..................................................... 9 hours
Electives ........................................................................................ 27 hours
(At least 15 of the 27 hours must be in geography; at least
6 of the 27 hours must be at the 200 -level; cannot include 970:299)

38 hours
Each student's program (beyond the required core courses) will be determined by individual needs in consultation with her/his graduate ad-
visor and the graduate coordinator. For the thesis option, an oral thesis defense is required. For the non-thesis option, a final presentation of the research paper is required.

## Major in German

The major in German is available on the thesis and non-thesis options; a minimum of 32 semester hours is required for either option. On the thesis option a minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work, including 6 hours of 740:299, is required. On the non-thesis option, a minimum of 12 hours of $\mathbf{2 0 0}$-level course work is required, of which no more than 3 hours of 740:299 may be included. In the case of the non-thesis option, a research paper must be approved by the student's committee and filed with the Department of Modern Languages before the comprehensive examinations may be taken. Successful completion of a final written and oral comprehensive examination is required for both the thesis and non-thesis options.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required:
Research Methods: 700:295.....0.0.0............................................ 2 hours
Literature courses .......................................................................... 8 hours
Linguistics, grammar and/or translation courses ................. 8 hours

Electives (6 hours 740:299 research required for the thesis
 32 hours
The remainder of the program will be determined by the student's needs in consultation with her/his advisor. No more than 6 hours in translation or 6 hours in interpreting may be applied toward this major.

## Teaching Emphasis

This program is offered on the non-thesis option only. A minimum of 34 semester hours is required, of which a minimum of 16 hours must be at the $\mathbf{2 0 0}$-level; a minimum of $\mathbf{2 0}$ hours must represent courses taught in German.

Successful completion of a final written and oral comprehensive examination is required. A research paper, written on an aspect of methodology, must be approved by the student's M.A. committee and filed with the Department of Modern Languages before comprehensive examinations may be taken.

Prerequisites: Student must hold a valid teaching license and have documentation of successful teaching experience. The student who has not completed 700:190, 740:101 and 740:103, or equivalents, before entering the program must add these courses to the requirements stated below.

## Required:

Educational Psychology: 200:214.......................................... 3 hours
Measurement and Research: 250:205 or equivalent............... 3 hours
German: Methods, one of which must be a methodological
topic in 740:226, 740:286 or 740:289 .................... 6 hours
TESOLApplied Linguistics, one of which must be at the
200-level, and one language-specific ............................. 6 hours
Culture and civilization* ........................................................ 6 hours
Literature* ............................................................................... 6 hours
Electives in German ...................................................................... 4 hours 34 hours
*One of these courses must be at the 200 -level. Courses must be taught in German.

## Major in Health Education

This major is available on the thesis and non-thesis options. A minimum of 31-35 semester hours is required depending on the emphasis chosen. Additional hours may be required, if, upon entering the graduate program, the student needs background courses. The thesis option requires 6 hours of thesis research 410:299. The non-thesis option requires a research paper for 2 hours credit 410:299. A minimum of 12 hours, exclusive of $\mathbf{4 1 0}: \mathbf{2 9 9}$ credit, must be at the $\mathbf{2 0 0}$-level.

The Graduate Record Examination (General Test) is not required for admission to the program.

Successful completion of a final written comprehensive examination is required for both the thesis and non-thesis options.

Three emphases are offered on this major:
I. Health Promotion/Fitness Management Emphasis Required:

Management: 150:130.................................................... 3 hours
Measurement and Research: 250:180 or
Health, Physical Education, and L̇eisure Services, Interdepartmental: 440:210 or 440:215 ................. 3 hours

## Measurement and Research: 250:205 or

Health,'Physical Education, and Leisure Services, Interdepartmental: 440:290. $\qquad$
Health Promotion and Education: 410:131; 410:166; 410:271; 410:290;410:293
... 15 hours
Health Promotion Graduate Seminar: 410:289 ( 1 hr.
each for two semesters)...................o.ocococo........... 2 hours
Physical Education: 420:253 ............................................ 3 hours
Electives: 410:299..........eno.eno............................................ 2 or 6 hours
Thesis option ( 6 hrs .)
Non-thesis option (2 hrs.)
31 or 35 hours
II. Community Health Education Emphasis

Required:
Health Promotion and Education: 410:131; 410:165; 410:167; 410:220; 410:290; 410:293 16 hours
Measurement and Research: 250:205 or
Health, Physical Education, and Leisure Services, Interdepartmental: 440:290 $\qquad$ 3 hours

Electives as approved by the Graduate Committee:
( 6 hrs. 410:299 required for the thesis option;
2 hrs. $410: 299$ required for the non-thesis option) ..... 12 hours
33 hours

## III. School Health Education Emphasis

Required:
Health Promotion and Education: 410:131; 410:290 .... 6 hours
Measurement and Research: 250:205 or
Health, Physical Education, and Leisure Services, Interdepartmental: 440:290 .................................... 3 hours
Health Promotion Graduate Seminar: 410:289 (1 hr. each for two semesters)........................................... 2 hours
Electives as approved by the Graduate Committee:
( $6 \mathrm{hrs}$. 410:299 required for the thesis option; 2 hrs. 410:299 required for the non-thesis option) ..... 21 hours 32 hours
The additional course requirements for this emphasis will be governed largely by teacher licensure requirements.

## Major in History

The object of this program is to prepare students for either furthe graduate study (thesis option recommended), teaching at the secondar or community college level (non-thesis option recommended), or hil) tory-related careers in government, business or private research (publi history emphasis recommended). As a general rule, students should hav a GPA of 3.20 or better for admission to the program. This major is avail able on the thesis and non-thesis options; a minimum of $\mathbf{3 0}$ semester hours is required for either option. The thesis option requires a minimum of 15 hours 200 -level course work, including a total of 3 hours of 96A:299 and 3 hours of 96B:299. The non-thesis option requires a minimum of 12 hours of $\mathbf{2 0 0}$-level course work and the completion of a research paper. Prospective majors must consult with the departme head about further requirements prior to beginning their programs.

The Graduate Record Examination (General Test) is not require for admission to the program.

For the thesis option, students must pass an oral comprehensive examination in the primary field and demonstrate reading competency in a second language. For the nen-thesis option, students must pass a writted comprehensive examination in the primary field and an oral compreher sive examination.

## Thesis Option:

## Required:

History: 960:280; 960:290.
6 hour
Seminar: 960:289 "Seminar in U.S. Historiography" (for students choosing American History as primary field) OR 960:200-level course (for students choosing European or Non-Western History as primary field) ... 3 houri Research: 96A:299; 96B:299 6 hours
Electives: (may take one course, up to 3 hours, outside the field of history)

15 hour

## Non-Thesis Option:

Required:
$\qquad$
Seminar: 960:289 "Seminar in U.S. Historiography" (for students choosing American History as primary field) OR 960:200-level course (for students choosing European or Non-Western History as primary field) ... 3 hour History: 960:200-level course................................................ 3 hourl
Electives: (may take one course, up to 3 hours, outside the field of history)

18 hour
30 hour'

## Public History Emphasis

This program is offered on the thesis option only. A minimum of 30 semester hours is required, of which a minimum of 15 hours of 200-level course work, including 6 hours of 96A:299 and 968:299 is required. As a prerequisite for admission to this program, student must have a B.A. in history or at least nine credit hours of history.

Successful completion of a final oral comprehensive examinatioy|| is required.

Required:
History: 960:106; 960:280; 960:290..o.acoo.....o.o....................... 9 hour

Seminar: 960:289 "Seminar in U.S. Historiography"............. 3 hourk,
Research: 96A:299; 96B:299 ...................................................... 6 hour,

30 hour

## Major in Leisure, Youth and Human Services

This major is designed to foster preparation for professional leadership roles in the administration of leisure, youth and human services agencies. The program offers the student the opportunity to take an active role in determining personal learning objectives and developing individual programs of study. The program supports professional development through the utilization of relevant philosophy, content, and skills in order to provide management and leadership for effective and efficient delivery of leisure, youth and human services. Students are encouraged to focus on study that has direct relevance to professional practice.

There are two curricular emphases available to students in this major: Community Leisure Services Programming and Youth and Human Service Administration. For each option, a minimum of 32 samester hours is required. Up to an additional 12 hours of undergraduate work may be required for students who do not have undergraduate preparation in the area. All undergraduate prerequisites must be fulfilled prior to enrollment in program-specific graduate course work. .

This major is available on the thesis and non-thesis options. The thesis option requires a minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work, including 6 hours of 430:299 Research. The non-thesis option requires a minimum of $\mathbf{1 2}$ hours of $\mathbf{2 0 0}$-level course work, including 3 hours of 430:299 Research. Successful completion of a final comprehensive examination (research paper/thesis) is required for both the thesis and non-thesis options.

The Graduate Record Examination (General Test) is not required for admission to the program.

## 1. Community Leisure Services Programming Emphasis

Students interested in the management of recreation and leisure services in public, quasi-public, and private/commercial agencies and organizations are encouraged to pursue an M.A. in Leisure, Youth and Human Services with a Leisure Services Management emphasis.

Required:
Research Methodology (select one of the following) .... 3 hours
Health, Physical Education, and Leisure Services, Interdepartmental: 440:290.
Sociology: 980:165; 980:178; 980:201.
Statistical Analysis (select one of the following). $\qquad$ 3 hours
Measurement and Research: 250:180 (or equivalent).
Sociology: 980:160.
Leisure, Youth and Human Services: 430:201; 430:202; 430:240; 430:250; 430:260. $\qquad$ 15 hiours
Research: 430:299 $\qquad$ 2 or 6 hours
Thesis option ( 6 hrs.) Non-thesis option ( 2 hrs .)
Electives approved by the department.......o.onoo............ono.....5-9 hours 32 hours

## 2. Youth and Human Service Administration Emphasis

Students interested in the administration of youth and human services in nonprofit and public agencies and organizations are encouraged to pursue an M.A. in Leisure, Youth and Human Services with a Youth and Human Service Administration emphasis.

```
Required:
    Research Methodology (select one of the following) .... 3 hours
        Health, Physical Education, and Leisure Services,
                Interdepartmental: 440:290.
        Sociology: 980:165; 980:178; 980:201.
    Statistical Analysis (select one of the following)
        3 hours
        Measurement and Research: 250:180 (or
            equivalent).
        Sociology: 980:160.
    Leisure, Youth and Human Services; 430:201; 430:240;
        430:250
        9 hours
```



```
        Thesis option ( 6 hrs.)
        Non-thesis option ( 2 hrs .)
Electives approved by the department.o.o.osoonooo................. 11-15 hours
    Recommended sub-focus areas:
    Youth Development focus:
        Educational Psychology: 200:116.
        Leisure, Youth and Human Services: 430:260;
            430:291 (2-6 hrs.).
        Youth and Human Service Administration:
            43Y:240; 43Y:244.
        Human Services Administration focus:
        Youth and Human Services Administration:
        43Y:251; 43Y:253; 43Y:254; 43Y:256.
                        32 hours
```

Note: Students interested in pursuing a doctorate in Leisure, Youth and Human Services should refer to page 177, Doctor of Education degree.

## Major in Mathematics

This major is available on the thesis and non-thesis options. A minimum of 36 hours is required for the thesis option; a minimum of 32-35 hours, depending on the emphasis taken, is required for the non-thesis option. A minimum of fifteen (15) hours of 200-level course work is required on the thesis option. A minimum of twelve (12) hours of 200level course work is required on the non-thesis option.

The Graduate Record Examination (General Test) is not required for admission to the program.

Successful completion of a final written comprehensive examination is required for the nen-thesis option.

Students whose undergraduate program does not show completion of $800: 141$ and $800: 162$ or their equivalents will be expected to take these courses as part of their M.A. program. At most one of these courses taken to fulfill this requirement can be applied to the elective courses listed below.

Courses taken to satisfy B.A. requirements may not be repeated to count toward the graduate program.

## Non-Teaching Emphasis

## Required:

Mathematics: $800: 155$ or $800: 189 ; 800: 201 ; 800: 203$; 800:240. $\qquad$ 12 hours
At least two of the following: 800:202; 800:204; 800:245; 800:266. ... 6 hours
Research: 800:299................................................................ 2 or 6 hours
Thesis option ( 6 hrs.)
Non-thesis option (2 hrs.)
Electives from the following
12 hours
Mathematics: Any of the courses listed above that were not used for the requirements there, or from among the following: $800: 141,800: 149,800: 150,800: 152$, 800:154, 800:157, 800:158, 800:161, 800:162, 800:167, 800:168, 800:169, 800:174, 800:175, 800:176, 800:178, $800: 180$ or $800: 185,800: 181,800: 182,800: 184$, $800: 187,800: 193,800: 196,800: 210,800: 246$, 800:263, 800:265, 800:273.

32-36 hours
If both $800: 141$ and $800: 162$ are taken as part of the mathematics program requirements, the program hours are 35-39.

## Secondary Emphasis

## Required:

Mathematics Education/Technology:
800:186 Studies in Learning Mathematics at the Secondary Level; 800:289 Seminar: Mathematical Connection Using Techppology; 800:291; 800:293 ....... 12 hours Mathematics:
a. Algebra/Number Theory: 800:144 or $800: 210$ or 800:240 3 hours
b. Analysis: $800: 140$ or $800: 142$ or $800: 156$ or 800:201 or 800:203
3 hours
c. Geometry: $\mathbf{8 0 0 : 2 6 5}$. ..... 3 hours
d. Algebra/Geometry: 800:155 or 800:245 or 800:266

3 hours
e. History: 800:180 or $800: 185$ or $800: 246$ ..... 3 hours
f. Logic/Set/Theory/Topology: 800:167 or 800:169 or $800: 182$ or $800: 263$

3 hours
g. Probability/Statistics: 800:152 or $800: 174$. ..... 3 hours
Research: 800:299 2-6 hours

Thesis option: 6 hrs. 800:299 and one course from each of six of the seven areas $\mathrm{a}-\mathrm{g}$, with at least two of those courses at the 200 -level.
Non-thesis option: 2 hrs. 800:299 and one course from each of areas $\mathrm{a}-\mathrm{g}$, with at least two of those courses at the 200-level.

35-36 hours

## Major in Mathematics for the Middle Grades (4-8)

This major is intended for teachers interested in mathematics for the middle grades (4-8) and for mathematics specialists and supervisors. Teacher licensure is a prerequisite for completing the program approval process for this major. Normally, candidates will have at least 2 years teaching experience.

This major is available on the non-thesis option only; a minimum of $\mathbf{3 2}$ hours is required. A minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work is required.

The Graduate Record Examination'(General Test) is not required for admission to the program.
Required:Mathematics: 800:191; 800:211; 800:213; 800:214;800:215; 800:220; 800:221; 800:222; 800:236;800:237; 800:238; 800:289 Seminar in ImplementingChange in Teaching Mathematics I; 800:289 Seminarin Implementing Change in Teaching Mathematics II;800:28929 hour
Electives as approved by the department. ..... 3 hour

## Major in Mental Health Counseling

This program is designed for those who intend to work in nonschool settings such as community and mental health centers, counselinill centers, and employee assistance programs. Specific areas of interest and the setting in which the person plans to work will determine the appror priate electives in a specialty (emphasis) area.

Students completing this program must pass a written compre hensive examination, successfully complete a research paper, and fulfil program-specific exit requirements. Those students electing a thesis option must, in addition, successfully complete a final oral comprehensivi examination.

This major is available on the thesis and non-thesis options. A minimum of 66 semester hours is required for the thesis option which includes 6 hours of 290:299, and a minimum of 60 semester hours for the non-thesis option. A minimum of $\mathbf{2 0}$ hours of 200-level course work is required.

The Graduate Record Examination (General Test) is not required for admission to the program.

Program requirements and detailed information on the major, including admission policies and procedures, should be obtained from the Department of Educational Leadership, Counseling, and Postsecondar) Education.


## Major in Music

Students wishing to take a course for graduate credit in the School of Music, or wishing to pursue a degree program in this department, must consult with the Associate Director of the School of Music for Graduate Studies prior to registration for any course. Detailed information concern4 ing requirements and procedures will be provided, and specified evidence of previous accomplishments will be reviewed.

The Major in Music involves a course of study comprising a mini 1 mum of specialization and a maximum of curricular flexibility. (For a listing and discussion of the majors which exist on the Master of Musid degree, see pages 168-171.)

An applicant for a graduate degree program in the School of Musid
should possess the baccalaureate degree in music or a demonstrated equivalent. The student should have attained a high degree of proficiency in one or more of the following areas: performance, theory-composition, music education, or music history.

The Graduate Record Examination (General Test) is not required for admission to the program.

A prospective major must take a written diagnostic examination in the areas of theory, music history, expository writing skills, and in the area of claimed competency, if different from the above (e.g., piano, brass, or woodwind instruments). This examination normally is taken immediately prior to initial registration as a graduate student. If necessary, a student will take courses to make up any deficiency; such courses will not count toward degree requirements.

Successful completion of a final comprehensive written examination is required for both thesis and non-thesis options. This examination normally will take place after the candidate has completed the course work required for the degree. The grade B-or above is required for all courses in the Graduate Music Core. Under extentuating circumstances, exceptions to this policy must be approved by the instructor of record, the Associate Director for Graduate Studies and the Director of the School of Music. For discussion of credit for applied music under the M.A. degree, see pages 235-236. For more information visit www. uni.edu/music.

## The Program

This major is available on the thesis and non-thesis options, and requires a minimum of $\mathbf{3 0}$ semester hours. Students selecting the nonthesis option will write a research paper. A minimum of 15 hours of 200level course work is required for the thesis option, including 6 hours of 5xx:299 Research. A minimum of 12 hours of 200-level course work is required for the non-thesis option.
Required Graduate Music Core:
Music Theory: 580:210; 580:211 ..... 6 hours
Music History and Musicology: 590:221 ..... 2 hours
Music Literature: one course from the following -Specialization: Applied Music
(540:1xxg) ..... 4 hours
Electives: music (all areas except applied music) ..... 8 hours
Other electives as approved by the department ..... 7 hours
( 6 hours of 5xx:299 Research for thesis option)$\overline{30}$ hours

## Program Certificate

For information on the following program certificates, see page 136 or contact the School of Music.

## Artist Diploma I

Artist Diploma II

## Major in Performance and Training Technology

This major is offered by the Department of Curriculum and Instruction as a program in performance and training technology for persons planning to work in non-K-12 school or corporate settings.

This major is available on the thesis and non-thesis options, and is designed for a minimum of 35 semester hours. A minimum of 15 semester hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of 12 semester hours of $\mathbf{2 0 0}$-level course work is required for the non-thesis option.

The Graduate Record Examination (General Test) is not required
for admission to the program.
All students completing the thesis option are required to pass an oral examination prepared and administered by the thesis committee. The examination will be comprehensive in nature and will normally accompany the thesis defense. A student completing the thesis option must include 6 hours of 240:299 in the program of study.

All students completing the non-thesis option are required to complete the Departmental Graduate Research Requirement and to pass a written comprehensive examination prepared and administered by the department at the end of the student's program of study.

Majors in this area will complete a basic core of course work applicable to all preparing to work as trainers, instructional designers, or production specialists. Specific areas of interest will determine the supporting electives. Teacher licensure is not required. The student's baccalaureate degree may be in any field.

```
Required:
    Instructional Technology: 240:139; 240:230; 240:235;
        240:240; 240:245; 240:289 .......................................... }17\mathrm{ hours
    Research: 240:299......................................................................or }6\mathrm{ or hours
        Thesis option (6 hrs.)
        Non-thesis option (2 hrs.)
Electives:
    A minimum of 12 hours of electives are required from the
        following courses:
        Instructional Technology: 240:150; 240:153; 240:170;
            240:205; 240:210; 240:260; 240:285; 240:286;
            240:297
                                12 hours
Other electives as advised (non-thesis option only) .................... }4\mathrm{ hours
                                35 hours
```


## Major in Physical Education

This major is available on the thesis and non-thesis options. A minimum of $\mathbf{3 0}$ semester hours is required for both options. Additional hours may be required if, upon entering the graduate program, the student needs prerequisites. Total hours for the thesis option includes 6 hours of Research 420:299. Total hours for the non-thesis option includes 2 hours of $420: 299$ for a research paper. A thesis/research paper defense is required, as well as successful completion of a final written comprehensive examination for both thesis and non-thesis options.

The Graduate Record Examination (General Test) is not required for admission to the program.

This major offers two emphases:

## I. Teaching/Coaching Emphasis:

This emphasis is designed for those students who plan to teach and/or coach primarily in the school setting at a variety of levels, and is available on the thesis and non-thesis options. A minimum of 15 hours must be at the 200-level for both the thesis and non-thesis options.

If the undergraduate degree in Physical Education does not include a theory class in either Elementary or Secondary Methods in Physical Education, the student will be required to make up the deficiency with one 3 hour undergraduate methods course. This would extend the Teaching/Coaching emphasis to a 33-hour minimum.

Additionally, if the undergraduate degree was not in Physical Education or the student does not have at least 12 hours of undergraduate theory classes (exclusive of activity classes and advanced skill and coaching classes) on the transcript, the student must take 12 hours of either undergraduate or graduate physical education course work to make up the deficiency; 3 hours of the additional 12
hours must be an undergraduate Elementary or Secondary Methods * in Physical Education course. This would extend the Teaching/ Coaching emphasis to a 42-hour minimum.

## Required:

Physical Education: 420:230; 420:231; 420:273; 420:297 $\qquad$ 12 hours
Physical Education: 420:274 or
Measurement and Research: 250:180 or
Health, Physical Education, and Leisure Services, Interdepartmental: 440:210 or 440:215 .. $\qquad$ 3 hours
Health, Physical Education, and Leisure Services, Interdepartmental: 440:290 or
Measurement and Research: 250:205 ............................... 3 hours
Research: 420:299. $\qquad$ 2 or 6 hours
Thesis option ( 6 hrs.)
Non-thesis option (2 hrs.)
Electives approved by the advisor ... $\qquad$ 6 or 10 hours
Thesis option ( 6 hrs .)
Non-thesis option ( 10 hrs .)
30 hours

## II. Scientific Bases of Physical Education:

This emphasis is designed for those who wish to concentrate their study in one of the subdisciplines of physical education, and is available on the thesis option only. A minimum of 21 hours, exclusive of $\mathbf{4 2 0} \mathbf{2 9 9}$ credit, must be at the $\mathbf{2 0 0}$-level.
Required:
Physical Education: 420:200 ..... 2 hours .
Health, Physical Education, and Leisure Services,Interdepartmental: 440:210 or equivalent; 440:290.6 hours
Research: 420:299 ..... 6 hours
Focus area: select one of the following. ..... 16 hours 30 hours
Exercise Science Focus:
Physical Education: 420:253; 420:260; 420:271 ..... 8 hours
Physical Education: 420:285 or 420:293; 420:289*. ..... 3 hours
Electives approved by the advisor. ..... 5 hours 16 hours
Psychomotor Behavior Focus:
Physical Education: 420:222; 420:251; 420:255. ..... 9 hours
Physical Education: 420:285 or $\mathbf{4 2 0 : 2 9 3 ; ~ 4 2 0 : 2 8 9 * ~}$ ..... 3 hours
Electives approved by the advisor. ..... 4 hours
*420:289 may be repeated as an elective for up to 6 hours.

## Major in Physics Education

This major is available on the thesis and non-thesis options. A minimum of $\mathbf{3 0}$ semester hours is required for either option.

The Graduate Record Examination (General Test) is not required for admission to the program.

Two emphases are available:

## Physics Education - Secondary:

This program is for high school teachers and requires Professional Core A or a special core arranged by the student and her/his graduate committee. The total number of hours required beyond the minimum of 30 semester hours will depend upon the student's undergraduate preparation. Both thesis and non-thesis options are available but non-thesis is recommended unless the student has a large number of undergraduate credits in physics.

## Physics Education - Community College:

A larger number of physics courses (combined undergraduate and graduate) is required than for the other program. The thesis optiou is normally required. If the student has a strong undergraduate backgrounff in physics, the program can be completed with the minimum of 30 graduate hours including thesis. Note: Effective July 1, 2003, individuul teaching in lowa community colleges are no longer required to hold stau issued teaching licenses. Completion of Professional Core B (pages 143) 144) with an appropriate distribution of courses in one or more subje areas may be highly recommended for teaching at a community coller Contact individual colleges to determine minimum requirements $f$ employment at that institution.

Required:
Science: 820:200 2 hour
Core A:
Educational Psychology: 200:214 or
Social Foundations: 260:234.............. 3 hous
Measurement and Research: 250:205 ............................... 3 hour
Electives ( 6 hrs. 880:299 required for thesis option)....o...........o.... 22 houri 30 houat
The following physics courses may not be used for credit in this major: 880:120, 880:157, and 880:158.

Attention is also called to the Chemistry-Physics Teaching emphas program available under the Science Major for the Master of Arts degre Students may inquire at the Physics Department office for informatide on this program.

## Major in Psychology

This major is available on the thesis option only and requirel a minimum of $41-44$ semester hours. A minimum of 15 semester hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. GRE examin tions are required for all applicants. Individual programs of study will be jointly developed by each student in consultation with the graduaf coordinator.

The M.A. program in psychology consists of three emphases: 1) clinical science, for those who wish to pursue doctoral-level study in clinical or counseling psychology or to become masters' level provideran psychological services operating in clinical settings under appropriate supervision; 2) industrial-organizational emphasis, for students interestef in pursuing either doctoral-level studies in industrial-organizatiotad psychology or a career in human resources; and 3) social, for studen wishing to pursue doctoral study in social and related areas of psychot ogy or careers as master's level data analysts. The program maintainsa a strong empirical, research-based orientation and seeks to: a) provid students with opportunities to develop skills in research methodologyi bl gain advanced knowledge of major areas of scientific psychology; and ch obtain basic competence in skills relevant to these areas. All students are required to complete a thesis for successful completion of this program. It is expected that students will, except under extraordinary circumstanat have a thesis proposal approved by their advisor by the beginning of their| second year of study. The program is set up so it should be completed in two full academic years and two summers. Students are strongly encoury aged to finish within this time frame.

In addition to meeting general university admission requirement applicants are also required to submit the following for consideratio 1) a departmental application form; 2) three letters of recommendation preferably from undergraduate psychology instructors; and 3) Gradual Record Examination (GRE) scores on the general aptitude tests (ad vanced psychology test scores required only for those applicants whel were not undergraduate psychology majors). All materials should be re-
ceived by the departmental graduate coordinator no later than February 1 to ensure consideration for financial aid for the following academic year or April 30, for consideration for admission to the program.

Required for all students:
Psychology: 400:239 3 hours
Readings: 400:285 2 hours
Thesis Research: 400:299 ....................................................... 6 hours

(determined in consultation with the Graduate
Coordinator)
Emphasis requirements (as listed below)
21-24 hours
41-44 hours

## Clinical Science Emphasis:

Required:
Psychology: 400:225; 400:244; 400:246;
400:249; 400:262; 400:270; 400:272
17 hours

Practicum: 400:297................................................................. 4 hours

## Industrial-Organizational Emphasis:

Required:
Psychology: 400:149; 400:157; 400:158; 400:232;
400:234; 400:237; 400:264............................................. 21 hours
Practicum: 400:297................................................................ 2 hours

## Social Psychology Emphasis:

Required:
Psychology: 400:149; 400:162; 400:218; 400:220;
400:261; 400:264
18 hours
Psychology: 400:29R..................................................................... 6 hours

## Major in School Library Media Studies

This major is available on the thesis and non-thesis options. A minimum of $\mathbf{4 0}$ semester hours is required for the thesis option, and a minimum of 36 semester hours is required for the non-thesis option. A minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of 12 hours of 200 -level course work is required for the non-thesis option.

The Graduate Record Examination (General Test) is not required for admission to the program.

Students choosing the thesis option are required to write a thesis and pass an oral defense conducted by the thesis committee. Students choosing the non-thesis option are required to complete the Departmental Graduate Research Requirement. In lieu of a comprehensive examination, all students must complete a comprehensive portfolio that meets the requirements of the division faculty, during their final semester of course work.

Students completing this major are eligible for the K-12 media specialist endorsement if they hold or are eligible to hold a teaching license.

## Required:

Instructional Technology: 240:150 ........................................ 3 hours
School Library Media Studies: 350:115; 350:121; 350:132;
350:134; 350:223; 350:225; 350:230; 350:250; 350:290; 350:295 29-31 hours

Thesis option (6 hrs.)
Non-thesis option (1-3 hrs.)
Electives: as approved by advisor to a program minimum
total of 36 hours: $0-3$ hours 36-40 hours
Students who have previous course work which is equivalent to
required courses are encouraged to take elective courses in instructional technology, gifted education, postsecondary education, or other educa-tion-related programs.

## Major in Science Education

This major requires as a prerequisite a bachelor's degree (teaching preferred) with a major in Science or in a specific science discipline. Teacher licensure is a prerequisite for completing the program approval process for this major.

This major is available on the thesis and non-thesis options. A minimum of 33 semester hours, including 6 hours of $820: 299$ for thesis research and writing, is required for the thesis option; a minimum of 35 semester hours, including completion of a creative component, is required for the non-thesis option. Successful completion of a final written comprehensive examination is required for the nom-thesis option. A minimum of 17 hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of $\mathbf{1 4}$ hours of $\mathbf{2 0 0}$-level course wark is required for the non-thesis option.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required:
Measurement and Research: 250:205 .................................... 3 hours
Science and Science Education: 820:200; 820:213; 820:290; 820:294 8 hours
Thesis or non-thesis option ....o..................................... 22 or 24 hours 33 or 35 hours

## Thesis Option


Courses from the College of Natural Sciences ...................... 10 hours
Electives from education or science and science education.......... 6 hours 22 hours

## Non-Thesis Option

Research: 820:299..........0.0.0.0.0.0.0.0................................................ 3 hours
Courses from the College of Natural Sciences ...................... 13 hours
Electives from education or science and science education.......... 8 hours
24 hours

## Earth Science Education Emphasis

The Earth Science emphasis differs from the Science Education major in that it provides the options of taking either 250:205 or 870:292 and either 820:299 or 870:299. The Earth Science Education emphasis also requires 8 hours of graduate credit in earth science and a total of $\mathbf{4 0}$ hours in earth science in combined undergraduate and graduate program.

## Required:

Measurement and Research: 250:205 or
Research Methods in Earth Science: 870:292 3 hours
Science and Science Education: 820:200; 820:213; 820:290; 820:294 8 hours
Thesis or non-thesis option ........................................ 22 or 24 hours
33 or 35 hours

## Thesis Option

Research: 820:299 or 870:299 .......................................................... 6 hours
Courses from the College of Natural Sciences, with at least
8 hours of earth science
10 hours
Electives from education or seience and science education........... 6 hours
22 hours

## Non-Thesis Option

Research: 820:299 or 870:299
3 hours
Courses from the College of Natural Sciences, with at least
8 hours of earth science .............................................. 13 hours
Electives from education or science and science education.......... $\underline{8}$ hours
24 hours

## Physics Education Emphasis

The Physics Education emphasis differs from the Science Education major in that it provides the option of taking either 820:299 or 880:299. A combined total of 40 hours in Physics is required: 32 hours of physics teaching from the undergraduate program and 8 hours of graduate level physics.

Required:
Measurement and Research: 250:205 .................................... 3 hours
Science and Science Education: 820:200; 820:213; 820:290; 820:294.
.8 hours
Thesis or non-thesis option ........................................ 22 or 24 hours 33 or 35 hours

## Thesis Option

Research: 820:299 or 880:299 6 hours
Courses from the College of Natural Sciences, with at least 8 hours of physics.

10 hours
Electives from education or science and science education.......... 6 hours
22 hours

## Non-Thesis Option

Research: 820:299 or 880:299'..
3 hours
Courses from the College of Natural Sciences, with at least 8 hours of Physics.

13 hours
Electives from education or science and science education.......... 8 hours
24 hours
Inquiries for additional information concerning this major, including assignment of an advisor and advisory committee, should be made to the chair of the Science Education faculty or the Dean of the College of Natural Sciences.

## Major in Science Education for Elementary Schools (K-6)

This major requires as a prerequisite a bachelor's degree (teaching) with a major in elementary education. It is available on both the thesis and non-thesis options. A minimum of 35 semester hours is required on the thesis option, and a minimum of 37 semester hours on the non-thesis option. A minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of $\mathbf{1 2}$ hours of $\mathbf{2 0 0}$-level course work is required for the non-thesis option.

Successful completion of a final written comprehensive examination is required for the non-thesis option.

The Graduate Record Examination (General Test) is not required for admission to the program.

[^10]
## Thesis Option

$$
\text { Research: 820:299..................................................................... } 6 \text { houx }
$$

Courses in science content from the disciplines of biology,
chemistry, earth science, and physics ....................... 10 hour
Courses in advanced education from the following .............. 6 hourl
Educational Psychology: 200:214.
Elementary, Early Childhood, and Middle Level Education: 210:141; 210:212.
Measurement and Research: 250:180; 250:205.

## Non-Thesis Option

Research: 820:299.
3 hour

Courses in science content from the disciplines of biology, chemistry, earth science, and physics
Courses in advanced education from the following .............. 9 hourd Educational Psychology: 200:214.
Elementary, Early Childhood, and Middle Level Education: 210:141; 210:212.
Measurement and Research: 250:180; 250:205
24 hours

## Notes:

1. The science content courses must be such that when combined with prior work the student has a broad background in the various science disciplines (biology, chemistry, earth science, physics). If the student's background is very limited, additional course work at a level lower than 100 g may be required by the advisory committee.
2. The student may substitute in each of the categories "science content" and "science education" up to 3 hours from $8 \times 0: 133 \mathrm{~g}, 8 \times 0: 233$ " $8 \times 0: 286,8 \times 0: 297$, and $820: 270$. Such substitutions must be approvel by the Science Education faculty.

## Major in Sociology

The major in Sociology is available on the thesis option only. A minimum of 30 semester hours, including 6 hours of 980:299 research, is required. A minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work is required.

Successful completion of a final written comprehensive examinatiot! is required.

The Graduate Record Examination (General Test) is not required for admission to the program.

## Required:

Sociology: 980:200; 980:201; 980:260; 980:278 ................... 12 hour
Sociology Seminar: 980:280 (repeated once) .......................... 6 hour'
Thesis Research: 980:299 ......................................................... 6 hours
Electives ....................................................................................... 6 hours
May be taken outside of sociology with approval of Graduate Coordinator.

30 houra
A reading knowledge of a foreign language is recommended.
Students entering graduate study in this department should have taken the following courses or should be able to demonstrate competend in them:

Sociology: 980:001; 980:080; 980:170.

## Major in Spanish

This emphasis is available on both the thesis and non-thesis op- tions. A minimum of 32 semester hours is required for either option A minimum of 18 hours of $\mathbf{2 0 0}$-level course work, including 6 hours of 780:299, is required for the thesis option. A minimum of 15 hours of $\mathbf{2 0 0}$-level course work is required for the non-thesis option. In the case of the non-thesis option, a research paper must be approved by the
student's committee and filed with the Department of Modern Languages before the comprehensive examinations may be taken. Successful completion of a final written and oral comprehensive examination is required for both the thesis and non-thesis options.

The Graduate Record Examination (General Test) is not required for admission to the program.


No more than 6 hours of translation 780:145 and/or 780:245 may be applied toward this major.

## Teaching Emphasis

This program is offered on the non-thesis option only. A minimum of 34 semester hours is required, of which a minimum of $\mathbf{1 6}$ hours must be at the $\mathbf{2 0 0}$-level; a minimum of $\mathbf{2 0}$ of those credits must represent courses taught in Spanish.

Successful completion of a final written and oral comprehensive examination is required. A research paper, written on an aspect of methodology, must be approved by the student's committee and filed with the Department of Modern Languages before comprehensive examinations may be taken.

Prerequisites: Student must hold a valid teaching license and must have documentation of successful teaching experience. The student who has not completed 700:190, 780:101 and 780:103, or equivalents, before entering the program must add these courses to the requirements listed below.

Required:


## Major in Speech-Language Pathology

This major is available on the thesis and non-thesis options. A minimum of $\mathbf{4 0}$ semester hours is required for the thesis option, and a minimum of 39 hours is required for the non-thesis option. A minimum of 6 hours of 51C:299 is required for the thesis option. A minimum of 32 hours 200-level course work is required.

The Graduate Record Examination (General Test) is required for admission to the program.

Successful completion of a final oral and/or written comprehensive examination is required for both thesis and non-thesis options.

Requirements for this major include both graduate and undergraduate courses considered essential to certification and the master's degree. Asterisked (*) courses will normally have been completed at the undergraduate level; if not, the student and departmental graduate academic advisor will determine how such incomplete requirements will be met. Students must complete 25 clock hours of supervised clinical observation prior to beginning clinical practice.

Communicative Disorders: 51C:106*; 51C:107*; 51C:111*; 51C:114*; 51C:125*; 51C:127*; 51C:129*; 51C:151*; 51C:152*; 51C:155*; 51C:162*; 51C:166*; 51C:168*; 51C:175*; 51C:177*; 51C:180*.

Required:

$$
\text { Communicative Disorders: 51C:200; 51C:282........................ } 3 \text { hours }
$$

Speech-Language Pathology core: 51S:222; 51S:226; 51S:228; 51S:229; 51S:230; 51S:232; 51S:250 (3 hrs.); 51S:255 (4 hrs.).

22 hours
Research: 51C:299...................................................................-...-... hours Thesis option ( 6 hrs.) Non-thesis option (1-3 hrs.)
Internship: 51C:257 and/or 280:250..................................4-16 hours

A minimum of 2 hours of $51 \mathrm{~S}: 289$ is required and other courses as approved by the graduate advisor.

Thesis option ( 5 hrs .)

- Non-thesis option (9 hrs.)

39-51 hours
Students may select a thesis or non-thesis option upon consultation with their graduate advisor. In the Department of Communicative Disorders, all students must have the signature of their advisor for registration for classes, including all adds and drops. Students who are suspended by the Graduate College may not enroll for major courses within this department.

All students must abide by the policies and procedures found in the Graduate Student Handbook, which is published by and available in the department.

The student, in consultation with the advisor, must choose courses designed to meet the standards of the Council on Academic Accreditation of the American Speech-Language-Hearing Association academic requirements for the Certificate of Clinical Competence. Recommendation for clinical certification will be given only upon successful completion of all academic and clinical requirements.

The student must complete a minimum of 350 hours in supervised clinical practicum, with a minimum of 250 of those hours at the graduate level. Certificates in specialty areas will be awarded to students who complete the core and a minimum of 6 additional hours in one or two areas of emphasis. Students should consult with their advisor concerning the specialty certificates.

Based on satisfactory completion of an undergraduate degree in Communicative Disorders or the equivalent, course work, clinical assignments, and the internship experience will ordinarily tàke four semesters and one summer.

Students seeking endorsement \#237 by the Iowa Department of Education must enroll in Human Relations (280:170g). In addition, students are required to complete a minimum of 10 semester hours of course work in professional education, to be selected under guidance of the major academic advisor, and 10 semester hours of practicum in a
public school internship.
The professional program in speech-language pathology is a program of both undergraduate and graduate courses leading to a Master of Arts degree. The program is designed to prepare students for careers as speech-language pathologists providing remedial services to the speech, language, and hearing disabled in a wide variety of settings including schools, hospitals, clinics, and care centers for the elderly.

## Major in Teaching English to Speakers of Other Languages (TESOL)

This major is available on the thesis and non-thesis options, and requires a minimum of 33 semester hours. The thesis option includes 6 hours of 630:299 Research; the non-thesis option requires an approved research paper. A minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work is required for either option.

The Graduate Record Examination (General Test) is not required for admission to the program.

Successful completion of a final written comprehensive examination is required for both thesis and non-thesis options, as specified by the TESOLApplied Linguistics faculty. See the TESOL Graduate Coordinator for details.

All students who have not had the following courses, or the equivalent, must include these courses as part of their graduate major:

TESOUApplied Linguistics: 630:125 or 630:130; 630:154; 630:156 or 630:160.

Students are required to meet with their advisors for a program approval interview. Students should complete this interview during the first semester of their course work. The department may require a student to complete course work in addition to the minimum of 33 semester hours required for a master's degree. In such cases, these hours will be specified at the time of the interview.

## Required:

TESOL/Applied Linguistics: 630:201; 630:292; 630:240 or 630:295; 630-297 12 hours
Electives (including 6 hrs. 630:299 for those on the thesis
option) 21 hours 33 hours
Native speakers of English must demonstrate proficiency in another language by earning at least a $\mathbf{C}$ grade in a second-semester, college-level course or by passing a specially designed examination. International students must have achieved a Test of English as a Foreign Language (TOEFL) score of 600 (paper-based)/250 (computer-based), or the equivalent, in order to demonstrate their proficiency in English. An international student may be required to take additional English language improvement courses at the discretion of the TESOU/Applied Linguistics faculty. Work taken to satisfy the language proficiency requirement does not count toward the 33 semester hours required to complete the major program.

Students who wish state licensure to teach should request information concerning licensure requirements from the Director of Teacher Education, University of Northern Iowa, or from the Department of Education in the state in which they plan to teach.

## Major in Technology

This major requires as a prerequisite a bachelor's degree with a major in technology, technology education, engineering, or related technical
fields. This major offers five emphases: A. Industrial Managemen印B. Industrial Training; C. Manufacturing Process Development; D. Ener Management; and E. Technology Education. Degree admission to the Master of Arts in Technology for emphases A, B, C, and D require an applicant to:

1) have earned a minimum of 8 semester hours of college mathematia and 8 semester hours of college physics and/or chemistry or otheat science related to the major area (this may be either graduate or undergraduate credit);
2) have earned a minimum of 15 semester hours in a major technical field and 8 semester hours in supporting technical subjects;
3) have recent and significant trade, technical, or technology teachind experience in a particular field or emphasis; 3 semester hours of approved co-op education/internship is another avenue for obtainity this experience;
4) department application;
5) Graduate College application;
6) TOEFL score of 550 (paper-based)/213 (computer-based) for applicants for whom English is not their first language;
7) three professional references;
8) GRE scores required for regular admission to the M.A. program and
9) undergraduate grade point average of 3.00 .

A student with an interest in Emphasis E will comply with items 3 to 9 from above, as well as the following:

1) have completed a minimum of one course in college mathematid one course in college physics and/or chemistry or other science related to the major area, and one course in computer programmine or a computer-based course;
2) have evidence of professional or leadership experiences.

The Industrial Management, Industrial Training, Manufacturia Process Development, Energy Management, and Technology Education emphases are available in the Master of Arts Major in Technology degre on both thesis and non-thesis options. A minimum of 31 semester hours is required for the thesis option and a minimum of 33 semester hours for the non-thesis option. The emphasis in Technology Educatioul is available only on the non-thesis option and requires a minimum of 33 semester hours. A minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of 12 hours of 200 -level course work is required for the non-thesis option. The successful comple tion of the departmental Professional Career Development Plan (PCDF is required for all emphases. For this program it is expected that the departmental research paper will be completed in the 330:292 developmell of a proposal and 330:270 finalization of the departmental paper course sequence. Successful completion of a final written and/or oral compre] hensive examination is required.

Students on the thesis option must complete 6 semester hours of 330:299. For the non-thesis option it is expected that the department? research paper will be completed in the 330:292 and 330:270 course sequence, or other 200 -level courses. Successful completion of a final orak and/or written comprehensive examination is required for both the thesis and non-thesis options.

[^11]
## A. Industrial Management Emphasis (16-18 hours)

This emphasis provides, advanced education for individuals who wish to expand their qualifications for supervisory positions in industry, business, and government.

```
Required:
    Management: 150:262 ................................................... }3\mathrm{ hours
    Industrial Technology: 330:258; 330:295 ....................... }6\mathrm{ hours
    Required Research ...........o.o.o..................................0.0 or }6\mathrm{ hours
        Thesis: 330:299 (6 hrs.)
        Non-thesis: 330:270 (for completion of the
        departmental research paper already
        listed in the core) (0 hrs.)
    Electives approved by advisor
```

$\qquad$

``` 1 or 9 hours
        Thesis (1 hr.)
        Non-thesis (9 hrs.)
        Suggested electives:
        Management: 150:249.
        Industrial Technology: selected from Industrial
        Technology Laboratory courses and other
        330:2xx courses such as 330:119,330:143,
        330:188, 330:250, 330:260, 330:288, 330:294,
        330:297.
        Psychology: 400:157; 400:158.
        English, Language and Literature: 620:106.
        Mathematics: 800:172.
        Economics: 920:135.
            Thesis Option 16 hours
            Non thesis Option 18 hours
```


## B. Industrial Training (16-18 hours)

This emphasis provides advanced education for the individual wanting to establish proficiency as a trainer, developer of instructional materials, or as an administrator for technical training programs in industry.

Required:
Management: 150:116 or 150:130 ................................. 3 hours
Industrial Technology: 330:290; 330:291 ....................... 6 hours
Required Research $\qquad$ 0 or 6 hours
Thesis: 330:299 ( 6 hrs )
Non-thesis: 330:270 (for completion of the departmental research paper as listed in the core) ( 0 hrs .)
Electives approved by advisor 1 or 9 hours
Thesis ( 1 hrs .)
Non-thesis ( 9 hrs .)
Suggested electives:
Management: 150:249; 150:266.
Instructional Technology: 240:205; 240:131; 240:235.
Measurement and Research: 250:180.
Industrial Technology: selected from Industrial Technology Laboratory courses and other 330:2xx courses such as $330: 119,330: 143$, $330: 188,330: 250,330: 258,330: 260,330: 288$, 330:294, 330:297.
Psychology: 400:157; 400:158.
English Language and Literature: 620:106.
Mathematics: 800:172.
Economics: 920:135.

## C. Manufacturing Process Development (16-18 hours)

This emphasis offers an excellent opportunity for individuals with technical preparation to expand their knowledge and skills in areas related to manufacturing technology and systems.

Required:
Industrial Technology: 330:228 or 330:294; 330:250;
330:258 or 330:260
. 9 hours
Required Research ....................................................................... or 6 hours
Thesis: 330:299 ( 6 hrs.)
Non-thesis: 330:270 (for completion of the departmental research paper as listed in the core) ( 0 hrs.)
Electives approved by advisor 1 or 9 hours
Thesis (1 hr.)
Non-thesis ( 9 hrs .)
Suggested electives:
Industrial Technology: selected from industrial technology Laboratory courses and other 330:2xx courses such as $330: 119,330: 188,330: 240,330: 245$, 330:254, 330:250, 330:260, 330:284, 330:286, 330:288, 330:294, 330:295, 330:296, 330:297.
English Language and Literature: 620:106.
Thesis Option 16 hours
Non-thesis Option 18 hours

## D. Energy Management (16-18 hours)

This emphasis will provide the skills, knowledge, and competencies in energy management to function effectively in diverse energy and/or environmental organizational settings. The degree program prepares graduates for positions in energy policy analysis, planning, and management in the public, private, and non-profit sectors.

## Required:

Industrial Technology: 330:166; 330:187 or 330:295;
330:240 or 330:245 .................................................. 9 hours
Required Research ..................................................... 0 or 6 hours
Thesis: 330:299 (6 hrs.)
Non-thesis: 330:270 (for completion of the
departmental research paper as listed in the core) (0 hrs.)
Electives approved by advisor .......................................... 1 or 9 hours
Thesis ( 1 hr .)
Non-thesis (9 hrs.)
Suggested electives:
Industrial Technology: selected from
industrial technology Laboratory courses
and other 330:2xx courses such as $330: 188$, 330:258, 330:260, 330:288.
Environmental Science: 830:250; 830:292; 830:289. -
Thesis Option 16 hours
Non-thesis Option 18 hours

## E. Technology Education (18 hours)

Available on the non-thesis option only. This emphasis provides advanced education for individuals who wish to expand their instructional skills and qualifications in the area of technology education.

Required:
Industrial Technology: 330:168; 330:228 or 330:294; 330:291 9 hours
Required Research. 0 hours
Non-thesis: 330:270 (for completion of the departmental research paper as listed in the core) ( 0 hrs .)
Electives approved by advisor ........................................................ 9 hours
Suggested electives:
Instructional Development: 200:214 or 240:240.
Instructional Technology: 240:205.
Industrial Technology: selected from industrial technology Laboratory courses and other 330:2xx courses such as $330: 119,330: 122$, $330: 150,330: 158,330: 162,330: 177,330: 188$, 330:228, 330:258, 330:288, 330:294, 330:296, 330:297.

Non-thesis option 18 hours

## Combined B_A./M.A. or B.S./M.A. - Technology

Students majors in an Industrial Technology program, interested in the combined program should deglare their intent by the end of the junior year (or have completed at least 90 semester hours). They should complete an Application for Admission to Graduate Study and the departmental application, as well as two professional references and have them submitted to the Graduate Coordinator before attempting to register.

Upon admittance to the combined B.A./M.A. or B.S./M.A. program, undergraduate students during their senior year may register for a maximum of 9 hours of graduate credit as a senior, with the approval of the Graduate Coordinator and the Department Head on a Student Request form. The admitted student may enroll and self-identify themselves with every instructor in the first two weeks of the semester in these 9 hours during the senior year, but before the baccalaureate degree is awarded. To be eligible for this exception to the undergraduate registration policies, the student must have earned at least 90 hours with a cumulative GPA of 3.00 or higher at the time of registration. Approval by the Graduate Dean must also be obtained on the same Student Request form, with the IT Graduate Coordinator serving as the Advisor and the Department Head's approval, when registering for the graduate courses. The combined total of enrolled course credits, both undergraduate and graduate may not exceed fifteen hours in a semester or eight hours in a summer session.

Graduate work completed on the early admission basis will be counted as graduate credit only after the baccalaureate degree has been awarded and enrolled for graduate course work within one year of the awarding of the baccalaureate degree. Actual admission to graduate study and classification as a graduate student commences the semester after the student has completed the baccalaureate.

## Major in TESOL/Modern Languages

This major is available on the non-thesis option only, A minimum of 33 semester hours is required, including a minimum of 18 hours at the $\mathbf{2 0 0}$-level. An approved research paper is also required. The student who has not completed $7 \times 0: 101$ and either 630:125 or 630:130 (or the equivalent) before entering the master's degree program must add these courses to the requirements listed below. There is no separate modern language requirement.

The Graduate Record Examination (General Test) is not required for admission to the program.

Successful completion of a final written comprehensive examind tion is required for this MA major, as specified by the TESOU/Applied Linguistics and Modern Language faculties. See the TESOL Graduat Coordinator for details.

## Required:

> TESOL/Applied Linguistics: 630:192; 630:193 or 630:194; 630:201; 630:240 or 630:289 or 630:295; 630:292; 630:297................................................................................ 18 hous

Electives: One of the following language emphases for a minimum total emphasis of 15 hours of which 6 hours must be at the 200 -level.

15 hourt 33 hourd

## French Emphasis:

Languages: 700:190* or 700:290 ........................................... 3 hour
French: 720:124 or 720:125; 720:203 or 720:207.................... 6 hour
Plus courses approved by the graduate French advisor........ 6 houre
15 hours

## German Emphasis:

Languages: 700:190* or 700:290 .............................................. 3 houre

Plus courses approved by the graduate German advisor....... 2 houre
15 houre

## Spanish Emphasis:

Languages: 700:190* or 700:290 ............................................ 3 houre
Spanish: one graduate course in each of the following areas:
culture and civilization; translation; linguistics...........6-9 hour
Plus courses approved by the graduate Spanish advisor ... 3-6 hour 15 hours
*700:190 is required for a teaching endorsement in Modern Language 700:190 has a required corequisite 7xx:191 (2 hours), which cannot count toward an M.A. degree.
Note: International students must have achieved a Test of English as a Foreign Language (TOEFL) score of 600 (paper-based)/250 (compute based), or the equivalent, in order to demonstrate their proficiency in English. An international student may be required to take additional English language development courses at the discretion of the TESOL Applied Linguistics faculty.

Students who wish state licensure to teach should request informat tion comcerning licensure requirements from the Director of Teachel Education, University of Northern Iowa, or from the Department of Education in the state in which they plan to teach.

This major is offered cooperatively by the Department of Englisy Language and Literature and the Department of Modern Language and is under the jurisdiction and supervision of the heads of these two departments.

## Major in Two Languages: French/ German, Spanish/French, German/ Spanish

The Two-Languages Major is available on both the thesis and nonthesis options for a minimum of 34 semester hours. A minimum of 20 hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of 16 hours of $\mathbf{2 0 0}$-level course work is required for the nonthesis option. Successful completion of a final written and oral com1 prehensive examination is required for both the thesis and non-thesiat options.

The Graduate Record Examination (General Test) is not require for admission to the program.
Required:
Languages: 700:295 ..... 2 hours
Literature courses: a 200 -level course in each language ..... 6 hours
Linguistics courses: a 200-level course in each language. ..... 6 hours
Culture and Civilization courses: a course in each language.. 6 hours
Electives: ..... 14 hours
(6 hrs. of xxx:299 required for the thesis option)
34 hours
The student's program will be planned in consultation with her/his advisor.

## Thesis Option:

In addition to 6 hours of xox:299 for the thesis, a minimum of 13 hours in each of the target languages is required. Of these, at least 7 hours in each language must be at the $\mathbf{2 0 0}$-level.

## Non-Thesis Option:

A minimum of 16 hours in each of the target languages is required. Of these, at least 8 semester hours in each language must be at the 200level.

## Major in Women's Studies

The M.A. in Women's Studies is a thesis-only program requiring a minimum of $\mathbf{3 4}$ semester hours of study; $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work, including 6 hours of xxx:299, is required. Additional non-program hours may be required, if courses on a student's program of study have prerequisites which instructors choose not to waive.

Successful completion of a final written comprehensive examination is required.

The Graduate Record Examination (General Test) is not required for admission to the program.

The Women's Studies curriculum is designed to meet the needs of students who strive for analytic clarity and rigor in gender-focused research. Students may employ the skills in reflective and critical analysis as well as the broad base of knowledge that they obtain in the program to 1) prepare for a Ph.D. program with a disciplinary or interdisciplinary focus on gender or, 2) enhance leadership skills for a career in the public or private sector or, 3) satisfy strong intellectual interests and curiosity while pursuing advanced education in the liberal arts.

Through core courses and selected electives, students enrolled in the Master of Arts in Women's Studies will accomplish several objectives: 1) examine theories concerning the social and historical constructions of gender; 2) explore how gender defines relationships among women, among men, and between men and women; 3 ) recognize that women's lives have been under-represented in traditional disciplines and investigate previously neglected materials in order to identify women's as well as men's roles in cultural or social endeavors; 4) study, compare, and evaluate an array of disciplinary perspectives on gender, including, but not limited to, cross-cultural, economic, sociological, historical, and literary perspectives; 5) identify intersections of gender with race, class, age, sexual identity, and ethnicity, both locally and globally, both in the present and in the past; and 6) employ new methodological. and critical approaches to materials customarily treated in other ways, revising the content and assumptions of particular disciplines to address gender more effectively.

Admission to the program is competitive. Detailed information on admissions requirements and procedures may be obtained from the Director of the Graduate Program in Women's Studies.
Required:
Humanities: 680:289 ..... 3 hours
Humanities: 680:290 ..... 1 hour
Sociology: 980:171 ..... 3 hours
History: 960:146 or 960:161 ..... 3 hours
English: 620:206 or
Philosophy: 650:250 ..... 3 hours
Research: $\mathbf{x o c} 299$ ..... 6 hours
Research Methodology: ..... 3 hoursWith approval of thesis advisor, one course from thefollowing:
Education, Interdepartmental: 190:305.
Measurement and Research: 250:301.
Psychology: 400:239.
Communication: 48C:113; 48C:180; 48C:183;
48C:189; 48C:222.
English Language and Literature: 620:161; 620:201.
History: 960:290.
Sociology: 980:160; 980:161; 980:165; 980:178 or
990:178; 980:201.
Electives
With the approval of her/his thesis advisor, the student individually designs an elective sequence, selecting courses from the humanities, fine arts, social and natural sciences that most expressly contribute to their thesis project.
For more information contact the Women's Studies Office, Baker 168, 319-273-7102, or http://fp.uni.edu/womenstudies.

## Master of Arts in Education Degree

This degree is designed for students whose work is primarily in professional education. Two plans of study leading to the degree of Master of Arts in Education are available: one plan requires the writing of a thesis; the other does not.

Many programs at this level carry with them the requirements for teacher licensure. In some cases, the student may be building up competency in a field in which $s($ he ) has had little or no preparation at the bachelor's level. For these reasons some of the programs must carry with them a substantial number of specific requirements. Whenever possible, however, an effort is made to keep the specific course requirements for each major at a minimum, so the student, with the help of her/his advisor and the departmental committee, may plan the graduate program which will best meet the student's individual needs.

Detailed information for each program and specific requirements for each major may be obtained from the head of the department offering the major.

## Department of Curriculum and Instruction

Curriculum and Instruction: Specialty Area Focus
Curriculum and Instruction: Early Childhood Education Curriculum and Instruction: Education of the Gifted Curriculum and Instruction: Elementary Education Curriculum and Instruction: Literacy Education Curriculum and Instruction: Middle Level Education

Department of Educational Leadership, Counseling, and<br>Postsecondary Education<br>Postsecondary Education: Student Affairs<br>Principalship<br>School Counseling

Department of Educational Psychology and Foundations<br>Educational Psychology<br>Educational Psychology: Professional Development for Teachers

## Department of Special Education <br> Special Education

Although a special curriculum is not available for supervisors of student teaching, a student can arrange a program to qualify for such a position.

## Requirements for Various Majors

Students who plan to receive the degree Master of Arts in Education (M.A.E.) must meet the graduation requirements for each major as described on pages 143 to 145.

## Department of Curriculum and Instruction

## Major in Curriculum and Instruction: Specialty Area Focus

The Curriculum and Instruction: Specialty Area Focus master's programs have as their focus the improvement of learning environments for $\mathrm{K}-12$ children. The programs will have a common core. Students entering this master's program will need to select a specialty area for their primary area of study. The diploma for the degree will indicate the specialty area.

This master's degree is available on the thesis and non-thesis options. A minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of $\mathbf{1 2}$ hours of $\mathbf{2 0 0}$-level course work is required for the non-thesis option. Students completing the thesis option are required to pass an oral comprehensive examination prepared and administered by the thesis committee. This comprehensive examination will normally accompany the thesis defense. Students completing the thesis option must include 6 hours of 210:299 on the program of study. Students completing the non-thesis option are required to meet the individual specialty area's requirements for the non-thesis option. These are cited within the description for each specialty area.

The student must complete the Curriculum and Instruction core, the professional core, required courses in the specialty area, and electives for a specified number of semester hours in the program of study.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required professional core (Core A):
Educational Psychology: 200:214 or
Social Foundations: 260:234 3 hours
 Required Curriculum and Instruction core:

Curriculum and Instruction: 210:201
3 hours
Literacy Education: 230:212........................................................... 3 hours
Instructional Technology: 240:232 ....................................... 3 hours
15 hours

## Curriculum and Instruction: Early Childhood Education

The degree program in this specialty area focus requires a minimuin of 30 or 33 semester hours.

The program is designed to improve the student's competence in teaching young children and in providing leadership for program devel opment and implementation.

Students completing the thesis option are required to pass an oral comprehensive examination prepared and administered by the thesil committee. The examination will be comprehensive in nature and will normally accompany the thesis defense. Students completing the thesi] option must include 6 hours of $210: 299$ on the program of study. Students completing the non-thesis option are required to complete (1) the department graduate research requirement and (2) a performance-band and/or standard-based measure demonstrating student competency upon completion of the program.

The program may be extended by students wishing to complete the State of Iowa licensure endorsement for Early Childhood Education.

The Graduate Record Examination (General Test) is not requiref for admission to the program.

Required professional core and Curriculum and Instruction core 15 hours
Specialty area:
Curriculum and Instruction: 210:155; 210:214; 210:220; 210:221 12 houre
Curriculum and Instruction: 210:299 3 or 6 hours Thesis option ( 6 hrs .) Non-thesis option (3 hrs.)

30 or 33 hours

## Curriculum and Instruction: Education of the Gifted

The degree program in this specialty area focus requires a minimum of 32 or 37 semester hours.

The program is designed to improve the student's competence in teaching gifted and talented children and youth and in providing leadership for program development and implementation.

Students completing the thesis option are required to pass an oral comprehensive examination prepared and administered by the thesis committee. This comprehensive examination will normally accompany the thesis defense. Students completing the thesis option must include 6 hours of 210:299 on the program of study. Students completing the nonthesis option are required to complete (1) the department graduate research requirement and (2) a performance-based and/or standards-based portfolio and oral comprehensive examination.

The program may be extended by students wishing to complete the State of Iowa licensure endorsement for Education of the Gifted.

The Graduate Record Examination (General Test) is not requirod for admission to the program.
Required professional core and Curriculum andInstruction core15 hours
Specialty area:
Curriculum and Instruction: 210:254; 210:255 ..... 6 houra
Curriculum and Instruction: 210:289 ..... 1 hour
Curriculum and Instruction: 210:299 ..... 1 or 6 hours
Thesis option ( 6 hrs .)
Non-thesis option (1 hr.)
Measurement and Research: 250:282 ..... 3 hours
Approved electives

$\qquad$
1 or 6 hoursThesis option ( 1 hrs .)

## Curriculum and Instruction: Elementary Education

The degree program in this specialty area focus requires a minimum of $\mathbf{3 0}$ semester hours.

The program is designed to improve the student's effectiveness as a classroom teacher, instructional leader, and curriculum developer.

Students completing the thesis option are required to pass an oral comprehensive examination prepared and administered by the thesis committee. This comprehensive examination will normally accompany the thesis defense. Students on the thesis option must include 6 hours of 210:299 on the program of study. Students completing the non-thesis option are required to complete the department graduate research requirement.

The program may be extended by students wishing to complete the State of Iowa licensure endorsement for Elementary Education.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required professional core and Curriculum and Instruction core . 15 hours
Specialty Area:
Curriculum and Instruction: 210:242; 210:243; 210:289....... 8 hours
Curriculum and Instruction: 210:299 ......................... 1-3 or 6 hours Thesis option ( 6 hrs .)
Non-thesis option (1-3 hrs.)
 30 hours

## Curriculum and Instruction: Literacy Education

The degree program in this specialty area focus requires a minimum of 33 semester hours.

The program is designed to develop and extend the expertise of educators in both leadership and classroom positions who wish to specialize in the area of literacy education. Students examine theories, programs and practices in the teaching of literacy, the evaluation of literacy development and the integration of literacy across curricular areas.

In addition to the university requirements for admission to graduate study, admission to this program includes the following requirements: 1) two recommendations from professional educators, and 2) satisfactory completion of writing examination. Preference may be given to applications with academic background and/or professional experience in education.

Students completing the thesis option are required to pass an oral comprehensive examination prepared and administered by the thesis committee. This comprehensive examination will normally accompany the thesis defense. Students on the thesis option must include 6 hours of 230:299 on the program of study. Students completing the non-thesis option are required to complete (1) the department graduate research requirement and (2) a performance-based and/or standard-based measure demonstrating student competency upon completion of the program.

The program may be extended by students wishing to complete any of the four State of lowa licensure endorsements: K-6 Reading, Reading Specialist, English/Language Arts K-6, or Secondary Reading.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required professional core and Curriculum and Instruction core 15 hours Specialty Area: Literacy Education: 230:238; 230:239; 230:240; 230:245 ..... 12 hours Literacy Education: 230:299.............................................. 3 or 6 hours Thesis option (6 hrs.)
Non-thesis option (3 hrs.)

Approved electives 0 or 3 hours
Thesis option (0 hrs.)
Non-thesis option ( 3 hrs .)

## 33 hours

## Curriculum and Instruction: Middle Level Education

The degree program in this specialty area focus requires a minimum of 32 or 35 semester hours.

The program is designed to increase competence in working with young adolescents. It can be varied (or extended) to fit the student's background and goals.

Students completing the thesis option are required to pass an oral examination prepared and administered by the thesis committee. The examination will be comprehensive in nature and will normally accompany the thesis defense. Students on the thesis option must include 6 hours of 210:299 on the program of study. Students completing the non-thesis option are required to complete the departmental graduate research requirement. In lieu of a comprehensive examination, all students must complete a comprehensive portfolio that meets the requirements of the division faculty, during their final semester of course work.

The program may be extended by students wishing to complete the State of lowa licensure endorsement for Middle Level Education.

The Graduate Record Examination (General Test) is not required for admission to the program.


## Department of Educational Leadership, Counseling, and Postsecondary Education

## Major in Postsecondary Education: Student Affairs

This major is designed to prepare an individual for a career in the administration of student affairs programs in college and university settings. This major is available on the thesis and non-thesis options. The thesis option requires a minimum of 48 semester hours, and the nonthesis option requires a minimum of 44 semester hours. A minimum of thirty-two (32) hours of $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of thirty (30) hours of 200-level course work is required for the non-thesis option.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required professional core:
Educational Psychology: 200:214 or 200:235 or
Social Foundations: 260:234
3 hours
Measurement and Research: 250:205 ...................................... 3 hours
Postsecondary education core:
Postsecondary Education: Student Affairs: 170:218;
170:222; 170:231; 170:260; 170:264; 170:266; 170:270 .. 21 hours
170:289 Seminar........................................................... 3 hours
170:290 Practicum (two are required for 6 hrs.)* ......... 6 hours
170:299 Research ..............................................o.o.o.... 2 or 6 hours
Thesis option ( 6 hrs .)
Non-thesis option (2 hrs.)
Electives may include, but are not limited to, the following.......... 6 hours Management: 150:130.
Postsecondary Education: Student Affairs: 170:230; 170:250;
170:256; 170:285; 170:291.
Education, Interdepartmental: 190:305.
Educational Psychology: 200:214.
Measurement and Research: 250:180; 250:181; 250:300.
Social Foundations: 260:234.
Counseling: 290:105; 290:220; 290:224; 290:225; 290:256.
Psychology: 400:157; 400:158.
Communication: 48C:151; 48C:153.
Thesis option 48 hours
Non-thesis option 44 hours
*Note: Upon advisement, some students may substitute course work for practicum. A license to teach is not required for this major.

## Major in Principalship •

This major is available on the thesis and non-thesis options. A minimum of 45 semester hours is required on the thesis option; a minimum of 39-40 hours is required on the non-thesis option. A minimum of 32 hours of 200-level course work, including 6 hours of 270:299, is required for the thesis option. A minimum of 32 hours of $\mathbf{2 0 0}$-level course work is required for the nen-thesis option. Successful completion of a final oral comprehensive examination is required for the thesis option. The student must complete the usual degree and licensure/endorsement requirements and must complete a minimum of one year of successful teaching appropriate to the major prior to graduation. For endorsement the student must have three years of teaching experience at either the elementary or secondary level. This program will be offered to cohort groups of $20-25$ students on and off campus over the ICN, through WebCT, and in face-to-face instructional sessions. This program will require the student to participate within the cohort group for a period of three years. New cohort groups will be started each year at the beginning of the fall semester.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required professional core:
Educational Psychology: 200:214 or
Social Foundations: 260:234 ................................................. 3 hours
Measurement and Research: 250:205 .................................... 3 hours
Required educational leadership core:
Educational Psychology: 200:116** or 200:232*....ooco..o.oo.o.2-3 hours
Special Education: 220:260 .................................................... 3 hours

Practicum (270:290 - Elementary or Secondary Principalship) integrated throughout the program.... 3 hours

39-40 hours

## Thesis Option

Research: 270:299 6 hery "Students seeking endorsement as an elementary principal will take 200:232 and Practicum 270:290 at the elementary level.
**Students seeking endorsement as a secondary principal will take 200:116 and Practicum 270:290 at the secondary level.

## Major in School Counseling

This program is designed for those who intend to work as counsed ors in school settings. A teaching certificate and teaching experience are desirable but not required in order to become licensed. Students com-1 pleting this program must pass a written comprehensive examinatiof successfully complete a research paper, and fulfill program-specific exit requirements. The thesis option requires successful completion of a final oral comprehensive examination, and the non-thesis option requires successful completion of a written comprehensive examination.

This major is available on the thesis and non-thesis options. For students who have a teaching degree, a minimum of 60 semester hours is required for the thesis option which includes 6 hours of 290:299, and a minimum of 54 semester hours for the non-thesis option. For student without a teaching degree, a minimum of 66 semester hours is requirel for the thesis option which includes 6 hours of 290:299, and a minimum of 60 semester hours for the non-thesis option. A minimum of 18 hours of $\mathbf{2 0 0}$-level course work is required.

The Graduate Record Examination (General Test) is not required for admission to the program.

Program requirements and detailed information on the major, including admission policies and procedures, should be obtained from the Department of Educational Leadership, Counseling, and Postsecondar Education.

## For students with a teaching degree:

Required:

$$
\text { Educational Psychology: 200-214............ono..aco........................ } 3 \text { hours }
$$

Measurement and Research: 250:205 .................................... 3 hours
Counseling: 290:103; 290:105; 290:210; 290:220;
290:224; 290:225; 290:226; 290:227; 290:228; 290:250; 290:254; 290:256; 290:262. 39 hours Required practicum and internship:

Counseling: 290:290 (3 hrs.); 290:291 ( 6 hrs.)...................... 2 hours 54 hours

## Thesis Option

 60 hours

## For students without a teaching degree:

Required:
Educational Psychology: 200:128; 200:148; 200:214.............. 7 hours
Measurement and Research: 250:205 .................................... 3 hours
Counseling: 290:103; 290:105; 290:210; 290:220;
$290: 224 ; 290: 225 ; 290: 226 ; 290: 227 ; 290: 228 ; 290: 250 ;$
$290: 254 ; 290: 256 ; 290: 262 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$
39 hours

Special Education: 220:150 ..................................................... 2 hours
Required practicum and internship:
Counseling: 290:290 (3 hrs.); 290:291 (6 hrs.) ...................... 9 hours 60 hours
Thesis Option

66 hours

## Program Certificates

For information on the following program certificate, see page 135
or contact the Department of Educational Leadership, Counseling, and Postsecondary Education.

Advanced Studies Certificate in Educational Leadership<br>Emphasis: Principalship<br>Emphasis: Superintendency Preparation Program

## Department of Educational Psychology and Foundations

## Major in Educational Psychology

This major is available on the thesis and nen-thesis options. A minimum of 36 semester hours is required for the thesis option and a minimum of 33 semester hours for the non-thesis option. A minimum of $\mathbf{1 5}$ hours $\mathbf{2 0 0}$-level course work is required for the thesis option. A minimum of 12 hours 200-level course work is required for the nonthesis option.

The Graduate Record Examination (General Test) is required for admission to the program.

This major is designed for 1) students planning further graduate studies in educational or school psychology; 2) persons with work experience as teachers, instructors or trainers in schools, business, or human service agencies who are seeking further professional development.

Required professional core:
Educational Psychology: 200:214............................................ 3 hours
Measurement and Research: 250:205 ...................................... 3 hours
Social Foundations: 260:234 or 200:140 (as approved by advisor) 3 hours
Educational Psychology emphasis: completion of at least 15
hours (advisor approved) in one of the three emphases
listed helow.
15 hours
Professional studies..............on............................................... 3 or 6 hours
Thesis option: 6 hrs. of 200:299.
Non-thesis option: 3 hrs. from 200:285, 200:290, 200:299.
Electives: a minimum of 6 hours .................................................. 6 hours
Electives will be selected with consultation with advisor and approval of the graduate coordinator.

| Thesis option | 36 hours |
| :--- | :--- |
| Non-thesis option | 33 hours |

## Development and Learning Emphasis:

Educational Psychology: 200:235 or (200:116 and 200:285); 200:220; 200:224; 200:241.
Measurement and Research: 250:180.
Research and Evaluation Emphasis:
Measurement and Research: 250:180; 250:181; 250:281; 3 hours in Development and Learning Emphasis; and one course from the following: 190:305; 250:270; 250:300; 250:301.
Context and Techniques of Assessment Emphasis:
Educational Psychology: 200:240; 200:280; 200:286; 200:289.
Special Education: 220:260
Measurement and Research: 250:281; 250:282; 250:283; 250:284.

## Major in Educational Psychology: Professional Development for Teachers

This degree program is specially designed to fulfill the professional development needs of experienced teachers. The intent of the program is to enable participants to increase their knowledge base in content areas or to develop expertise in new content areas while sharpening their
understanding and skills as classroom teachers. The program seeks to provide a course of study directly tied to teaching practice, in which course selection, student learning, and required research are organized around issues and problems which teachers view as important. The degree program provides ample opportunity for exploring the relationship between theory and practice, with a focus on improving student learning. The program presents a variety of opportunities for peer collaboration, development of strategies for implementing innovations in classroom practice, and thoughtful analysis of contemporary issues and problems facing teachers.

This degree program invites participation from early childhood, elementary, middle school, and high school teachers. This major is available on the thesis and non-thesis options. A minimum of 36 semester hours is required for the thesis option and a minimum of 33 semester hours for the non-thesis option. The thesis or research paper is expected to explore a topic that will improve classroom practice and student learning. A minimum of 15 hours of 200 -level course work is required for the thesis option. A minimum of 12 hours of 200 -level course work is required for the non-thesis option.

Successful completion of a final oral comprehensive examination is required for both the thesis and non-thesis options.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required professional core:
Educational Psychology: 200:214* .............................................. 3 hours
Measurement and Research: 250:205 ...................................... 3 hours
Social Foundations: 260:234*.................................................... 3 hours

Thesis option ( 6 hrs.)
Non-thesis option ( 3 hrs .)
A minimum of 8-12 hours from each of the following three professional components:
Component I: Advanced professional course work......... 8-12 hours
Component II*: Theoretical-philosophical course work ..8-12 hours
Component III: Advanced academic course work taken from one department...................................................-12 hours

Thesis option 36 hours
Non-thesis option 33 hours
*A student may use one of two common professional core courses, either
200:214 or 260:234, to fulfill 3 hours of the Component II requirements.

## Department of Special Education

## Major in Special Education

This major is designed to prepare special education professionals for leadership positions and for advanced professional studies. To be eligible for the Special Education Consultant endorsement the student must have four years of successful teaching experience, two of which must be congruent with the desired Special Education Consultant endorsement. Students desiring to be endorsed as Work Experience Coordinators must hold a Special Education Teaching 7-12 endorsement.

This major is available on the thesis and non-thesis options, and requires a minimum of $\mathbf{3 0}$ semester hours. A minimum of 18 hours of 200-level course work is required for both thesis and non-thesis options.

Students on the thesis option must complete 6 hours of $220: 299$ Research and present a defense of the thesis. Students on the non-thesis option must submit an acceptable graduate research paper and successfully complete a final written comprehensive examination.

The Graduate Record Examination (General Test) is not required for admission to the program.
Required professional core:
Educational Psychology: 200:214 or
Social Foundations: 260:234

$\qquad$ ..... 3 hours
Measurement and Research: 250:205 ..... 3 hours
Required special education core:
Special Education: 220:289 ..... 3 hours
Emphasis in special education (choose one from below) ..... 21 hours
30 hours
Field Specialization Emphasis
Required:
Special Education: 220:256 or 220:260; 220:293; 220:295 ..... 9 hours
Approved electives ( 6 hrs . of 220:299 Research requiredon thesis option)12 hours
Special Education Consultant Emphasis
Required:
Elementary, Early Childhood, and Middle Level Education: 210:221 or 210:270 ..... 3 hours
Special Education: 220:240; 220:245; 220:290 ..... 11-12 hours
Approved electives ( 6 hrs. of 220:299 Research required on thesis option) ..... 5-6 hours21 hours
Career/Vocational Programming and Transition Emphasis
Prerequisite: 220:151.
Required:
Industrial Technology: 330:182 ..... 2-3 hours
Special Education: 220:254; 220:290

$\qquad$
12 hours
Approved electives ( 6 hrs. of 220:299 Research required on thesis option)
20-21 hours

## Master of Business Administration Degree

Graduate study in business at UNI provides a broad-based, integrated program which emphasizes the functional areas of business in order to provide the graduate with a balance between theoretical knowledge and practical business operations. The M.B.A. curriculum is designed to meet the needs of students with undergraduate backgrounds in the liberal arts, sciences, engineering, as well as those with degrees in business. The M.B.A. program is accredited by AACSB International, the primary accrediting organization on management education.

The plan of study prescribed for the degree is structured to develop graduates who will have acquired: 1) an understanding of the theoretical and practical aspects of the process of policy formulation and implementation; 2) a comprehension of environmental factors-economic, legal, social, and political-which affect the individual in the performance of managerial responsibilities; 3 ) an understanding of analytical techniques and the use of quantitative data in the administration of business controls; 4) the ability to communicate ideas effectively in oral and written form; and 5) a basic knowledge of selected functional areas of business administration.

Admission to the Master of Business Administration program is dependent upon the quality of the applicant's undergraduate record, the score on the Graduate Management Admission Test (GMAT), and writing skills demonstrated on the addendum to the application. The GMAT must be taken prior to acceptance into the program.

This program is designed to qualify men and women for creative leadership in business. This program is available on the non-thesis option only. Students who enter the program with the undergraduate re-
quirements of a baccalaureate degree in one of the areas of business will normally require 31 semester hours to complete the program; those whed enter the program with an undergraduate degree in an area other thand business will be required to complete some Pre-MBA courses in busineal or show that they have completed equivalent courses in previous academs ic work. A minimum of $\mathbf{1 2}$ hours of $\mathbf{2 0 0}$-level course work is required Candidates for the degree are also required to successfully complete and pass a business capstone experience at the end of their program of stud The result of this experience is reported in a paper and filed in the M.B.A office.

## Required:

Accounting: 120:262 ................................................................. 3 hourd
Marketing: 130:263 ............................................................... 3 houre
Management: 150:249; 150:250: 150:262;
150:272; 150:274; 150:276..................................................... 16 houra
Finance: 160:266 ................................................................... 3 houra
Economics: 920:260.......................................................................... 3 houra
Topics: 3 hours from the following.......................................... 3 hours
Accounting: 120:280.
Marketing: 130:280.
Management: 150:280.
Finance: 160:280.
Economics: 920:280.
31 hours
Detailed information for the M.B.A. may be obtained from the College of Business Administration, UNI or on the M.B.A. Web site www.cba.uni.edu/mba.

## Master of Music Degree

Students wishing to take a course for graduate credit in the School of Music or wishing to pursue a degree program in this department must consult with the Associate Director for Graduate Studies in Music prior to registration for the course. Detailed information concerning requirement and procedures will be provided, and specific evidence of previous accomplishments will be reviewed.

The Master of Music degree is a professional degree designed to prepare the graduate for: 1) enhanced opportunity in public and privaty school music teaching, 2) a college teaching career, 3) a performance career as a professional musician or composer, or 4) further graduate work at the doctoral level. The following majors are offered:

Composition
Conducting
Jazz Pedagogy
Music Education
Music History
Performance
Piano Performance and Pedagogy
An applicant for a graduate degree program in the School of Music should possess the baccalaureate degree in music or a demonstrated equivalent. The student should have attained a high degree of proficiencer in one or more of the following areas: performance, theory-composi tion, conducting, music education, or music history. In addition to the common regulations and requirements applicable to all master's degree programs, the following are required for admission to the specific majorp

Composition majors: portfolio and, if possible, tape recordings of compositions.

Conducting majors: in-person audition and interview with at least two members of the Graduate Conducting faculty. It is also recommend a ed the applicant have two years of conducting experience beyond the
baccalaureate degree. A video recording may be submitted in lieu of the in-person audition, but may not satisfy the audition requirement. Tapes should be of high quality and show the applicant in rehearsal situations, though performance recordings may also be included. Video recordings should include two or three works of varying styles, and be taken so as to clearly indicate the conductor's facial and other physical gestures.

Jazz Pedagogy: in-person audition and interview.
Music Education majors: in-person or telephone interview with a member of the Graduate Music Education faculty.

Music History majors: scholarly paper.
Performance majors and Piano Performance and Pedagogy majors: in-person audition (a tape recording would be accepted if the in-person audition would pose undue hardship).

A prospective major must take a written diagnostic examination in the areas of theory, music history, expository writing skills, and in the area of claimed competency, if different from the above (e.g., piano, brass, or woodwind instruments). This examination normally is taken immediately prior to initial registration as a graduate student. If a student is required to take remedial courses to make up any deficiency in preparatory work, those courses will not be counted toward degree requirements.

A minimum of 15 semester hours of 200 -level course work is required of all majors enrolled for the thesis/recital option. The thesis option requires a minimum of 6 semester hours of $\mathrm{xxx}: 299$ Research. A minimum of 12 semester hours of $\mathbf{2 0 0}$-level course work is required of all majors enrolled for the non-thesis option.

The Graduate Record Examination (General Test) is not required for admission to the Master of Music programs.

Successful completion of an oral and written comprehensive examination is required of all students in this degree program. This examination normally will take place after the candidate has completed the course work required for the degree. The grade B- or above is required for all courses in the Graduate Music Core as well as all core courses in the specific degree plans. Under extenuating circumstances, exceptions to this policy must be approved by the instructor of record, the Associate Director of Graduate Studies and the Director of the School of Music. For more information go to www.uniedu/music

## Major in Composition

This major is offered on the thesis/recital option only, and requires a minimum of 34 semester hours. A minimum of 15 semaster hours of 200 -level course work is required.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required:
Graduate music core:
Music Theory: 580:210; 580:211.......................................... 6 hours
Music History and Musicology: 590:221....................... 2 hours
One course from the following -
590:110; 590:111; 590:112; 590:114; 590:115......... 3 hours
Specialization:
Applied Music: 540:254 $\qquad$ 12 hours
Music electives: 11 hours, primarily in the areas of music literature and theory 11 hours 34 hours

## Major in Conducting

This major is offered on the thesis/recital option only, and requires a minimum of $\mathbf{3 6}$ semester hours. A minimum of 15 semester hours of $\mathbf{2 0 0}$-level course work is required.

The Graduate Record Examination (General Test) is not required for admission to the program.
Required:
Graduate music core:
Music Theory: 580:210; 580:211 ..... 6 hours
Music History and Musicology: 590:221 ..... 2 hours
One course from the following -Specialization:
Music Organizations and Ensembles: 530:1xx*

$\qquad$
4 hours(Only one hour of ensemble per semester willcount toward degree requirements.)
Applied Music: 540:221 or 540:222 12 hours
Performance Literature and Repertory: 595:131 or595:140 or 595:1423 hours
Music electives: as approved by advisor ..... 6 hours
36 hours

## Additional requirements:

1. Two consecutive semesters (fall/spring) of residency with fulltime status (minimum of 9 graduate hours per semester).
2. Conducting recital.
3. Recital paper.
4. Conducting document (research paper).
5. Score reading:
A. Choral Conducting Majors - Ability to read and perform at the keyboard (allowing some time for advance preparation) an SATB open score of medium difficulty (e.g., Palestrina motet).
B. Instrumental Conducting Majors - Ability to read and interpret a moderately complex instrumental score.
6. Students are required to enroll in applied music in their performance area during the semester that they present their required recital.
*Large ensemble placement will be determined by audition.

## Major in Jazz Pedagogy

This major is offered on the thesis/recital option only, and requires a minimum of $\mathbf{3 6}$ semester hours. A minimum of 15 semester hours of 200-level course work is required.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required:
Graduate music core:
Music Theory: 580:210; 580:211 6 hours

Music History and Musicology: 590:221........................ 2 hours
One course from the following -
590:110; 590:111; 590:112; 590:114; 590:115* ...... 3 hours
Specialization:
Music Techniques: 560:152 or 560:252*; 570:252 ......... 4 hours
Music Theory: 580:127; 580:128.....to............................ 4 hours
Music Organizations and Ensembles: 530:116 .............. 8 hours ( 2 hrs. in jazz ensembles participation required each semester of residence)
Music electives $\qquad$ To be selected from the following:

Applied Music: 540:140; 540:153; 540:156; 540:157.
Music Techniques: 560:130 preferred.
Music History and Musicology: 590:160 preferred.
36 hours
Additional requirements:

1. Jazz performance recital.
2. Recital paper.
3. Jazz bass proficiency.
4. Jazz piano proficiency.
5. Jazz drum set proficiency.
*Strongly recommended

## Major in Music Education

This major is available on the thesis and non-thesis options. A minimum of 34-36 semester hours is required for the thesis option. A minimum of 32 semester hours is required for the non-thesis option. A minimum of 15 semester hours of $\mathbf{2 0 0}$-level course work is required for the thesis option and a minimum of 12 semester hours of $\mathbf{2 0 0}$-level course work is required for the non-thesis option.

The Graduate Record Examination (General Test) is not required for admission to the program.

## Required:

Graduate music core:
Music Theory: 580:210; 580:21 6 hours
Music History and Musicology: 590:221......................... 2 hours
One course from the following -
590:110; 590:111; 590:112; 590:114; 590:115......... 3 hours
Music Education core:
Music Education and Methods: 570:221; 570:230;
570:282
9 hours
Specialization (Choose from A, B1, B2, B3, B4, C or D) ..... 12 hours
32 hours

## Thesis Option:

Required:
Research: 570:299 (in lieu of electives in selected specialization) $\qquad$ 34-36 hours

## Specialization:

A. Choral ( 12 hours)

Music Techniques: 560:122; 560:135.
Music Education and Methods: 570:130.
Performance Literature and Repertory: 595:131.
Electives*: 4 hours.
B. Instrumental ( 12 hours)

Option 1 - Band
Music Techniques: 560:121.

Music Education and Methods: 570:255.
Performance Literature and Repertory: 595:142.
Electives": 4 hours.
Option 2 - Jazz
Music Techniques: 560:152 (three levels - Basic, Intermediate and Advanced).
Music Education and Methods: 570:255.
Music Theory: 580:127.
Electives*: (including course work in jazz pedagogy) 4 hours.
Option 3 - Strings
Music Techniques: 560:121.
Music Education and Methods: 570:255.
Performance Literature and Repertory: 595:140.
Electives*: 4 hours.
Option 4 - Piano Pedagogy
Music Education and Methods: 570:148; 570:257; 570:258.
Performance Literature and Repertory: 595:120.
Applied Piano: 540:146.
C. Elementary/General ( 12 hours)

Music Education and Methods: 570:275; 570:276; 570:277; 570:278; 570:279.
Electives": 2 hours.
D. Schools and Curriculum ( 12 hours)

Music Education and Methods: 570:245; 570:250**; 570:255; 570:287.
Electives***: 3 hours
"Electives as approved by Associate Director for Graduate Studies in Music.
**Students electing the non-thesis option must enroll in 570:250 each semester until the final research project is completed. Students electing the thesis option will enroll in 570:299 in lieu of 570:250 and 3 hours of electives.
***Recommended electives: 570:27x; 570:286; 590:0xx; applied lessons conducting, ensembles, summer workshops.
Note: A maximum of 2 hours of ensembles ( $530: x 0 x$ ) and 4 hours of applied music ( $540: 00 x$ ) may be counted toward fulfilling minimum degree requirements.

## Major in Music History

This major is offered on the thesis option only, and requires a minimum of $\mathbf{3 0}$ semester hours. A minimum of 15 semester hours of $\mathbf{2 0 0}$-level course work is required.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required:
Graduate music core:
 Music History and Musicology: 590:221 ........................ 2 hours
One course from the following -
590:110; 590:111; 590:112; 590:114; 590:115.......... 3 hours
Specialization:
Music History and Musicology: 590:299 (research for thesis -6 hrs.);

Electives: (maximum of $\mathbf{2}$ hrs. may be in applied music) ..omomono. $\mathbf{I}$ hours
30 hours
Additional requirement:
Reading proficiency in either German or French.

## Major in Performance

This major is offered on the thesis/recital option only, and requires a minimum of 30-36 semester hours. A minimum of 15 semester hours of $\mathbf{2 0 0}$-level course work is required of all majors enrolled for the thesis/recital option.

The Graduate Record Examination (General Test) is not required for admission to the program.

- Required:

Graduate music core:
Music Theory: 580:210; 580:211 _.no.............................. 6 hours
Music History and Musicology: 590:221......................... 2 hours
One course from the following -
590:110; 590:111; 590:112; 590:114; 590:115......... 3 hours
 32-36 hours

## Specialization:

## A. Wind, Percussion, Keyboard or Strings Major

Music Ensemble: 530:1 xx (g)*** .oooo.o.o.o.o.o.o........................... 2-4 hours
Applied Music: 540:2xx ........................................................ 10 hours
Performance Literature and Repertory*: 595:120............... 2-4 hours

21-23 hours

## B. Voice Major

Choral Ensemble: 530:110*** ................................................ 2 hours
Applied Music: 540:249 ....................................................... 12 hours
Opera Performance: 560:161; 560:162.................................... 4 hours
Vocal Coaching: 560:145 ........................................................ 2 hours
Performance Literature and Repertory: 595:120** (section
$8,9,10,11$ or 12) ........................................................... 4 hours
Music electives recommended ................................................. 1 hour
Ensemble: 530:110.
Music Techniques: 560:145; 560:161 or 560:162.
Music Education and Methods: 570:130.
Performance Literature and Repertory: 595:120; 595:130.

25 hours
*Keyboard majors are required to take 595:120 sections 03 and 04.
**595:120 section 08 is required if vocal literature has not been taken at the undergraduate level.
***530:1xx Voice majors may choose Concert Chorale, UNI Singers or Women's Chorus. Chamber Singers may count for only 1 hour of ensemble credit toward the degree requirement. Instrumental majors will choose Jazz Band I, Symphony Orchestra, Symphonic Band, or Wind Symphony, but only 2 hours of Jazz Band I may be counted toward minimum degree requirements. String majors are required to complete 4 hours of ensemble $530: 117(\mathrm{~g})$ Symphony Orchestra. Chamber Music and/or accompanying may be elected by keyboard majors.

## Additional requirements:

1. Two consecutive semesters (fall/spring) of residency with fulltime status (minimum of 9 graduate hours per semester).
2. Performance recital.
3. Recital paper.
4. Two successful applied jury examinations (grades A or B).
5. Voice majors must:
A. Demonstrate diction proficiency (by diagnostic examination) in English, Italian, German, and French at the level of Diction II (560:031).
B. Have successfully completed one semester of college-level study in two of the following languages: Italian, German, or French.
6. Students are required to enroll in applied music in their performance area during the semester they present their recital.

## Major in Piano Performance and Pedagogy

This major is offered on the thesis/full recital and non-thesis/half solo recital and pedagogy options. Both options requires a minimum of $\mathbf{3 3}$ semester hours. A minimum of 15 semester hours of $\mathbf{2 0 0}$-level course work is required of all majors enrolled for the thesis/full recital option. A minimum of 12 semester hours of $\mathbf{2 0 0}$-level course work is required of all majors enrolled for the non-thesis/half solo recital and pedagogy option.

The Graduate Record Examination (General Test) is not required for admission to the program.

## Required: <br> Graduate music core:

Music Theory: 580:210; 580:211 ..... 6 hours
Music History: 590:221 ..... 2 hours
One course from the following - 590:110; 590:111; 590:112; 590:114; 590:115.......... 3 hours
Piano performance:
Applied Music: 540:246 ..... 6 hours
Music Literature: 595:120 (Piano 1); 595:120
(Piano II) ..... 4 hours
Piano pedagogy:
Music Education and Methods: 570:148; 570:149;
570:257; 570:258; 570:260. ..... 10 hours
Electives ..... 2 hours 570:250; 570:260; 570:285.

## Additional requirements:

Final project-
Options: Full solo recital/recital paper Half solo recital and pedagogy project (Pedagogy project: workshop or research paper)
Students are required to enroll in applied music in their performance area during the semester they present their recital.

## Program Certificate

For information on the following program certificates, see page 136 or contact the School of Music.

## Artist Diploma I

Artist Diploma II

## Master of Public Policy

The Master of Public Policy is a professional interdisciplinary degree program providing specialized and advanced training for students wishing to assume roles as policy analysts, principally in the governmental and nonprofit sectors of society.

Core courses in the program provide thorough coverage of the contributions of political science, economics, and history to the analysis of public policy. The core also includes methods courses that provide training in the rigorous methods of policy analysis required of professionals in the field.

Focus courses allow a student to develop an understanding of a particular substantive or methodological area of policy analysis. Continuing participation in seminars allows discussion of current practice and
development, provides a forum for on-going discussion, and includes philosophical orientation to the ethical questions which arise in policy contexts. An internship with a public policy organization introduces the student to the professional environment and allows application of theory and methods to actual policy problems.

Admission to the program is competitive. Entering students are expected to have acquired introductory level knowledge, from their undergraduate training, of statistical methods, micro-economics, and American governmental process. Courses are available outside the degree program, for students who lack such background (e.g., 920:054, 942: 014, and 980:080). The M.P.P. is available on the non-thesis option, and requires $\mathbf{4 1 - 4 5}$ semester hours. A minimum of $\mathbf{1 2}$ hours of $\mathbf{2 0 0}$-level course work is required.

The Graduate Record Examination (General Test) is not required for admission to the program.

Required:

Economics: 920:117; 920;125 ................................................ 6 hours
Public Policy: 950:205 (3 hrs.); 950:208; 950:260; 950:275.. 12 hours
Political Science: 942:153; 942:173........................................... 6 hours
History: 960:225..................................................................... 3 hours
Focus area courses: as approved by advisor.................................... 9 hours
Internship: 950:281 ..o..................................................................... 4 hours
Prerequisites: 950:275 and 942:173 or an approved substitute.
This requirement may be waived at the discretion of the
program director.
Electives: as approved by advisor $\qquad$ 3 hours
Suggested: 920:169 or 950:210.
41-45 hours
M.P.P. students, in consultation with their faculty advisors, select a focus area and the course work needed to complete their study of public policy. They may choose either a substantive area of public policy (for example, urban policy, environmental policy, human services policy, criminal justice policy) or courses that provide them with additional training in public policy or methods of policy analysis.

In 950:208, with the support of the instructor and benefitting from interaction with other students, each student prepares a research paper within the focus area.

If focus courses have prerequisites which instructors choose not to waive, these courses will be in addition to the above degree requirements.

The internship may be undertaken during the summer following the first or second year of classes or during any other approved period.

Successful completion of a final written and oral comprehensive examination is required.

## Accelerated Master of Public Policy Program

1. Upon declaration of an undergraduate major, any UNI student may apply to the director of the program for entry into the preparatory phase of the Accelerated M.P.P. program. A student must have at least a 3.40 GPA in order to be considered for this program.
2. The following four courses are eligible to be included in the preparatory phase of the program: 920:117, 920:125, 942:153, and 942:173. All of these courses have prerequisites which must be completed before the student may enroll in them. Other courses may be included with the approval of the director, and with the approval of the department in which the course is taught.
3. In order to count one of these courses toward accelerated completion of the M.P.P., the student must sign a contract with the instruc-
tor to do the same extra work that is required by that instructor for students to receive graduate credit for the course. No graduate cred will be awarded, but the student will be allowed to waive the courel upon entering the M.P.P. program.
4. In order to count one of these courses toward the accelerated M.P.; the student must reçeive a minimum grade of B in the class. In addition, to be considered for admission into the graduate portion of tha accelerated M.P.P., students must maintain a minimum of 3.00 GPA in all of their undergraduate work.
5. After completion of the preparatory phase, the student will be considered for admission to the graduate portion of the accelerated M.P.P. program. Enrollment in the graduate program requires the completion of the B.A. degree.
6. In order to complete the M.P.P. in one additional year after the B.A. students will also need to enroll in 7 hours of graduate work in the final semester of their senior year, as currently provided for in this catalog (see pages 61-62).
7. All other degree requirements for the regular M.P.P. program also apply to the Accelerated Program.

## Master of Science Degree

The following majors are offered:
Athletic Training
Biology
Chemistry
Computer Science
Environmental Science
Environmental Technology
Environmental Health

## Major in Athletic Training

The Athletic Training Master of Science degree is designed for those who are NATABOC certified athletic trainers who wish further education in treatment and rehabilitation of the physically active. This degreed is offered on a thesis and non-thesis option. A minimum of 36 semester credit hours is required. A minimum of 21 credit hours at the 200-level is required for both the thesis and non-thesis options.

Admission is competitive and based upon undergraduate gradeq point average, recommendations, and interview results. Once admitted each student will be required to complete the program of study as well as the clinical component of the program. All additional requirements and information are available at the Division of Athletic Training office.

## Required:

| Measurement and Research: 250:180 ................................. 3 hours |  |
| :---: | :---: |
|  |  |
|  |  |
| Physical Education: 420:289 (2 hrs.); 420:297 (8 hrs.) ........ 10 hours |  |
| Health, Physical Education and Leisure Services, |  |
| Interdepartmental: 440:290 ....................................... 3 hours |  |
|  |  |
|  | Thesis Option (6 hrs.) |
|  | Non-thesis Option (2 hrs.) |

Electives 0 or 4 hours
Thesis option (0 hrs.)
Non-thesis option ( 4 hrs .)
Common Electives: 420:200; 420:222; 420:251; 420:253; 420:255; 420:260; 420:271.

36 hours

## Major in Biology

This major is available for students seeking an extensive research experience. Students interested in enrolling in the program must complete an application and be admitted to the program. Applications should include three recommendations, and transcripts of undergraduate and graduate credits. Results of the GRE in the subject area of biology are required for all students who have not completed a biology degree at UNI.

This major is available on the thesis option only. A minimum of 32 semester hours is required, including a minimum of 21 hours of course work and a minimum of 9 hours of thesis research. A minimum of 18 hours of $\mathbf{2 0 0}$-level course work is required for the thesis option.

Students are required to pass an oral comprehensive examination in defense of their final thesis.

This program is flexible and designed to allow students, working with their advisory committee, to tailor a program to fit student interests and aspirations in biology.

## Required:

$\mathbf{2 0 0}$-level courses (take one course in at least two of the content areas listed below - prerequisites vary). 6 hours Biology: 840:202 ........................................................... 4 hours Biology: 840:292 ............................................................ 1 hour
Research: 840:299.................................................................... 9 hours
Electives: 100 g or above (excluding 840:299) ............................. 12 hours
32 hours
Content areas:
I. 840:240 Advanced Cellular and Molecular Biology
II. 840:250 Advanced Physiology and Development
III. 840:260 Advanced Ecology
IV. 840:270 Advanced Systematics and Evolutionary Biology

## Combined B.A./M.S. or B.S./M.S. Biology

The B.A./M.S. or B.S./M.S. degree program is a five-year program offered on the thesis option only, leading to both the B.A./B.S. and M.S. degrees in biology. This program prepares students for doctoral graduate studies in biology and it provides training for work as a biologist in academic, industrial, and government laboratories. Students interested in this program can declare their intent by the end of the junior year, provided they have an overall grade point average (GPA) of 3.00 or above. An Application for Admission to Graduate Study should be completed and the student's interest in the Combined B.A./M.S. or B.S./M.S. Program in Biology indicated on the application itself.

Once admitted to the program, undergraduate students (who are classified as seniors), may register for graduate credit as a senior, with the approval of the department head (see guidelines on pages 61-62). The student presents a signed Student Request form (with appropriate signatures), when registering for graduate credit as a senior. The combined total of course credits, both undergraduate and graduate, may not exceed 15 hours in a semester or 8 hours in a summer session. Graduate work completed on the early admission basis will be counted as graduate credit only if the student actually earns the bachelor's degree at the end of the semester or summer session in which the course work is taken. Actual admission to graduate study and classification as a graduate student commences the semester after the student has completed the baccalaureate.

## Major in Chemistry

This major is available on the thesis option for students seeking an extensive research experience in a fríendly environment featuring regular interaction with their faculty mentors. Graduates of the program are well prepared for technical positions in industrial or government laboratories
or for continued study in doctoral programs in chemistry. Students interested in the program must submit a complete application, three letters of recommendation, and transcripts of undergraduate and graduate credits to the Chemistry Department.

A minimum of $\mathbf{3 0}$ semester hours, including 9 hours of thesis research 860:299, is required for this degree. A minimum of 18 hours of $\mathbf{2 0 0}$-level course work is required. Research specialization is available in the areas of analytical chemistry, biochemistry, chemical education, inorganic chemistry, organic chemistry, and physical chemistry; students generally select faculty mentors during their first semester of study.

Students are required to pass an oral comprehensive examination in defense of their final thesis.

The Graduate Record Examination (General Test) is not required for admission to the program.
Required:
Science: 820:200 ..... 2 hours
Chemistry: 860:289 ..... 1 hour
Chemistry: 860:292. ..... 1 hour
Chemistry: 860:299. ..... 9 hours
Electives (including at least 9 additional hours of 200-level course work in chemistry). ..... 17 hours 30 hours

## Combined B.A./M.S. Chemistry

The B.A./M.S. degree program is a five-year program offered on the thesis option only, leading to both the B.A. and M.S. degrees in chemistry. This program prepares students for doctoral graduate studies in chemistry and it provides training for work as a chemist in industrial and government laboratories. Students interested in this program can declare their intent by the end of the junior year, provided they have completed 860:141 and have an overall grade point average (GPA) of 3.00 or above. An Application for Admission to Graduate Study should be completed and the student's interest in the Combined B.A./M.S. Program in Chemistry indicated on the application itself.

Once admitted to the program, undergraduate students (who are classified as seniors), may register for graduate credit as a senior, with the approval of the department head (see guidelines on pages 61-62). The student presents a signed Student Request form (with appropriate signatures), when registering for graduate credit as a senior. The combined total of course credits, both undergraduate and graduate, may not exceed 15 hours in a semester, or eight (8) hours in a summer session. Graduate work completed on the early admission basis will be counted as graduate credit only if the student actually earns the bachelor's degree within one year from the time the student took the course and will not be counted toward the undergraduate degree. Students must meet the admission requirements of the Graduate College and the Chemistry Department upon transition from undergraduate to graduate status at the end of the senior year. Program requirements for the M.S. are quoted above. Actual admission to graduate study and classification as a graduate student commences the semester after the student has completed the baccalaureate.

## Major in Computer Science

This M.S. program is designed to foster preparation for applied professional careers in the computing sciences. The program emphasizes concentration in a professional sub-discipline, while at the same time providing enough breadth and theory to enable the graduate to adapt to developments in the discipline as a whole. Areas of concentration currently available include artificial intelligence, computer science education, computer systems, information storage and retrieval, and network administration.

This major is available on a thesis and non-thesis option. A mini-
mum of 33 semester hours is required for completion of the M.S. program. Students who select the thesis option will be required to complete at least 6-9 hours of 810:299 thesis research. Students who select the nonthesis option must complete a 6 -hour software development project. A minimum of eighteen (18) hours of $\mathbf{2 0 0}$-level (or ahove) course work is required. For both the thesis and non-thesis options, students must pass an oral defense of their final project.

The Graduate Record Examination (General Test) is required for admission to the program.

Courses in the student's areas of concentration provide in-depth knowledge of a professional sub-discipline. These 15 hours consist of 9 hours within computer science (excluding both computer science education and research credits) and 6 cognate hours from outside computer science. These hours must be approved by the Graduate Committee.

Bachelor's-level experience in computer science is suggested for program admission, but students from related disciplines who show outstanding promise are also encouraged to apply. Students without a bachelor's degree in computer science may be required to complete up to 14 hours of course work in the discipline before gaining full admission to the program.

Required:

$$
\text { Computer Science: 810:240; 810:270; 810:280........................ } 9 \text { hours }
$$

Concentration area: ......................................................................... 15 hours
Electives ........................................................................................ 2 hours 33 hours
Students in this program are exempt from general limitations on the number of hours of research credit. Master of Science Computer Science programs of study may include 6 hours or more of 810:299 research credit. However, the number of hours greater than 6 hours must be in addition to the minimum 33 hours required for the degree.

## Major in Environmental Science/ Technology and Health

The curriculum in the Environmental Science/Technology and Health program provides academic and research opportunities for students seeking terminal master's degrees. The curriculum emphasizes environmental related course work in the various disciplines (biology, chemistry, geology, industrial technology, physics, and environmental health) as well as additional courses selected from university offerings at large to assure a high level of competence in the student's area of major interest. Working in cooperation with the sciences, industrial technology, and health departments, graduate students are afforded excellent opportunities for field, laboratory, and industrial research through association with a large staff of scientists studying environmental issues.

Students interested in enrolling in the program must complete an application and be admitted to the program. Applications should include three letters of recommendation and transcripts of undergraduate and graduate credits. Students wishing to pursue the Environmental Technology Emphasis must hold or be eligible to obtain a bachelor's degree in engineering or industrial technology. UNI students may enter this program at the end of the junior year under the B.A./M.S. or B.S./M.S. programs offered in biology, chemistry, geology, or physics (see below).

The Graduate Record Examination (General Test) is not required for admission to the program.

This program is available on the thesis option only. A minimum of $\mathbf{3 0}$ semester hours is required. A minimum of 18 hours of $\mathbf{2 0 0}$-level course work is required. Successful completion of a final written and oral comprehensive examination is required. Beyond the required courses, the graduate advisory committee for each student will select additional course work tailored to the interests and research of the student.
Environmental Science Emphasis:
Required Courses:
Environmental Science: 830:200; 830:235; 830:250 ..... 9 hourd
Environmental Science seminar: 830:289. ..... 3 hour
Research: 830:299 ..... 6-9 hour
Electives ..... 2-12 hour
30 hour
Environmental Technology Emphasis:
Required Courses:
Industrial Technology: 330:240; 330:245 ..... 6 houre
Environmental Science: 830:200 or 830:235 or 830:250 ..... 3 hourd
Environmental Science seminar: 830:289. ..... 3 hour
Research: 830:299 ..... 6-9 hourd
Electives ..... 2-12 hourd30 hourd
Environmental Health Emphasis:
Required Courses:
Environmental Science: 830:165; 830:200; 830:235 ..... 9 hours
Environmental Science seminar: 830:289. ..... 3 hour
Health Promotion and Education: 410:293 ..... 3 hours
Research: 830:299 ..... 6-9 hours
Electives ..... $6-9$ hour30 hourd

## Combined B.A./M.S. or B.S./M.S. Environmental Science/Technology and Health

Students interested in the B.A./M.S. or B.S./M.S. in Environmental Science/Technology and Health should declare their intent by the middle of the junior year. An Application for Admission to Graduate Study, should be completed and the student's interest in this program indicated on the form itself.

Once admitted to the program, undergraduate students (who are classified as seniors), may register for graduate credit as a senior, with the approval of the department head (see guidelines on pages 61-62) The student presents a signed Student Request form (with appropriatu) signatures), when registering for graduate credit as a senior. The combined total of course credits, both undergraduate and graduate, may not exceed 15 hours in a semester or 8 hours in a summer session. Graduatel work completed on the early admission basis will be counted as graduatt credit only if the student actually earns the bachelor's degree at the end of the semester or summer session in which the course work is taken. Actual admission to graduate study and classification as a graduate student commences the semester after the student has completed the baccalaureate.

## Master of Social Work Degree

The Master of Social Work program is accredited by the Council on Social Work Education.

The mission of the University of Northern Iowa's Master of Social Work degree program is to prepare students for advanced micro practict or social administration. There is commitment to serve the community, and to contribute new knowledge to the field. Students and faculty are also committed to creating environments that enhance optimal human potential and growth. Theoretical underpinnings and learning environ-1 ment are based on systems and strengths perspectives. Advocacy and
promotion of cultural sensitivity, human rights, and social and economic justice are central to the program.

The Master's Degree in Social Work (M.S.W.) is available only on the non-thesis option. The M.S.W. program is designed to prepare students for the advanced practice of social work in a variety of public and nonprofit settings. There are two avenues to the M.S.W. degree: the Two Year program, open to persons with baccalaureate degrees in other fields, and the Advanced Standing program, which is available only for qualified students who have graduated from a Council on Social Work Education (C.S.W.E.) accredited baccalaureate social work program. The M.S.W. program is offered only as a full-time program.

All M.S.W. students will complete a concentration in either Micro Practice or Social Administration. The Micro Practice concentration is designed to prepare students for advanced social work practice with individuals, families, and groups. The Social Administration concentration is designed to prepare students for advanced administrative practice including: leadership, program planning and development; organizational development and change; and how to seek effective funding of programs. The concentration course credit can only be completed at the University of Northern Iowa.

The Two Year program requires a minimum of 60 semester hours, which consists of a generalist foundation core of 29 semester hours and completion of one of the two concentrations. The program is offered in cohort groups and consists of two full consecutive academic years with field practicum concurrent with fall and spring academic course work or with second year field practicum during the summer following completion of all other course work. Students are strongly encouraged to finish within this time frame. A minimum of 39 hours of $\mathbf{2 0 0}$-level course work is required for the non-thesis option.

The Advanced Standing program requires a minimum of 38 semester hours. The program consists of a summer core of 7 hours, preceding one full academic year of concentration courses with field practicum concurrent with fall and spring academic course work or with field practicum during the summer following completion of all other course work. Students are strongly encouraged to finish within this time frame. A minimum of $\mathbf{3 2}$ hours of $\mathbf{2 0 0}$-level course work is required for the non-thesis option. Advanced Standing students may be required to take additional foundation core courses at the University of Northern Iowa.

The Graduate Record Examination (General Test) is not required for admission to the program; however, applicants may wish to submit GRE scores in support of their application.

Admission to the M.S.W. is competitive. Applicants must comply with all of the policies and procedures pertaining to admission to graduate study as set forth in the catalog (pages xxx to rox). In addition, applicants are required to submit the following in order to be considered for admission.

1. The Department of Social Work M.S.W. application.
2. Three letters of reference, using the official M.S.W. departmental reference forms.
3. A personal autobiographical statement.
4. Official transcripts for all post-secondary institutions attended (with the exception of the University of Northern Iowa), sent directly from the college or university attended to the Office of the Registrar at the University of Northern Iowa.

## Major in Social Work

## Required for Two Year Program:

Social Work foundation core: (for all two year students) 450:210; 450:211; 450:212; 450:213; 450:214; 450:215; 450:216; 450:218; 450:219. 29 hours Concentration: (select one of the following) 31 hours 60 hours

## Required for One Year Advanced Standing Program:

Social Work: (summer courses for all one year students)

Concentration: (select one of the following) ...................... 31 hours 38 hours

## Micro Practice Concentration:

Social Work: 450:240; 450:241; 450:242; 450:243; 450:244; 450:250; 450:255. 25 hours
Electives to be selected in consultation with program advisor. . 6 hours 31 hours

## Social Administration Concentration:

Social Work: 450:250; 450:255; 450:260; 450:261; 450:262; 450:263; 450:264

25 hours
Electives to be selected in consultation with program advisor. .. 6 hours 31 hours
For information concerning admission or required courses for the M.S.W., contact the Department of Social Work, M.S.W. Program, Sabin 30, Cedar Falls, IA 50614-0405, or phone 319-273-5910, or visit www. uni.edu/socialwork/msw $1 . \mathrm{html}$.

## Specialist Degree

The requirements concerning program approval, graduation, scholarship, residence, examinations, and thesis are the same as for the Specialist in Education Degree (see pages 176-177.)

## Major in Science Education

This major is available on the thesis and non-thesis options. A minimum of 30 semester hours of post-nuester's degree credit is required. The student's program must be approved by the advisory committee and the chairperson of the Science Education faculty. If no thesis was written for the master's degree, one must be completed for this program. No more than 6 hours of 820:299 research credit may be included in the 30 hours of post-master's credit. A minimum of $\mathbf{2 0}$ hours of $\mathbf{2 0 0}$-level course work is required for the thesis option and non-thesis option. Successful completion of a final written comprehensive examination is required for the non-thesis option.

The Graduate Record Examination (General Test) is not required for admission to the program.

Each student's program will include a minimum of 30 hours of science content including 12 hours outside the subject area of emphasis and 16 hours within a subject area of emphasis.

[^12] 30 hours

Additional hours, if required, may be selected from these suggested electives:
Education, Interdepartmental: 190:305*.
Elementary, Early Childhood, and Middle Level Education: 210:141; 210:142; 210:212; 210:242; 210:254; 210:270.
Measurement and Research: 250:180*; 250:281*; 250:300*; 250:301*.
Social Foundations: 260:234.
Science and Science Education: 820:270.
Information concerning details of the major is available from the Chair of the Science Education faculty or the Dean of the College of Natural Sciences.

## Specialist in Education Degree

The major in School Psychology at the University of Northern Iowa leading to the Specialist in Education Degree involves breadth of preparation as well as depth in a particular field of specialization.

Course work requirements for the Specialist in Education Degree are defined in terms of a three-year graduate program, including internship and work taken on the master's degree. A minimum of 63 semester hours beyond the bachelor's degree is required for completing the program.

The School Psychology major is open to students who hold a master's degree from an accredited graduate school, and who meet the requirements set forth below.

Detailed information on the School Psychology major may be obtained from the Department of Educational Psychology and Foundations.

## Department of Educational Psychology and Foundations

## Major in School Psychology

Admission to the Ed.S. program in School Psychology requires an earned, accredited master's degree and a prior graduate preparation equivalent to UNI's M.A.E.: General Educational Psychology degree program with an emphasis in Context and Techniques of Assessment.

The Graduate Record Examination (General Test) is required for admission to the program.

Students with deficiencies will be notified prior to admission. Any deficiencies in the student's background will be added to the student's Ed.S. program requirements.

This major is available on the thesis option. A student who did not complete a thesis at the master's degree level must select the thesis option to complete the Ed.S. degree.

This major is also available on the non-thesis option. Students who completed a thesis as part of a master's degree program may request to have the Ed.S. thesis requirement waived. At the time of admission, the student requesting a waiver will submit a copy of the master's thesis to the School Psychology Committee. The thesis will be reviewed by the School Psychology Committee to determine if the work meets Ed.S. program thesis standards. This determination will be based on 1) the relevance of the topic to the practice of school psychology, 2) whether the thesis is empirically based, 3) whether the thesis is of such quality that it would be accepted as an Ed.S. thesis in the program. Notice of approval or nonapproval of the waiver of the Ed.S. thesis will be sent by the program coordinator to the student, the Graduate College, and the Office of the Registrar.

A student who qualifies for the non-thesis option will complete a research paper on a topic related to school psychology. Depending on the extent of the research paper, the student may earn 1-3 semester hours of
research credit.
For the thesis and non-thesis options, a minimum of 30 semestel hours is required. A minimum of $\mathbf{1 5}$ hours of $\mathbf{2 0 0}$-level course werk is required. Successful completion of a final oral examination is required

Required:
Educational Psychology: 200:232 or 200:240; 200:290
( 3 hrs.); 200:286 or 200:289 or 250:281; 250:283......... 12 hout
Professional studies:
200:291. .. 6 hour

Thesis option (6 hrs.)
Non-thesis option (1-3 hrs.)
Literacy Education: 230:238. 3 hour
Counseling \& Behavior Modification: 290:254 or 400:272
or equivalent.
3 hour
Electives as approved by committee................................................. 0 h hour
Thesis option ( 0 hrs.)
Non-thesis option ( 1.5 hrs .)
30 hourd

## Program Approval

The requirements for completion of a program of study (GF-1) are indicated on page 142.

## Graduation Requirements

The student shall complete the general requirements for the Specin) ist in Education Degree and shall meet the requirements as specified by the departmental committee using a combination of graduate coursem taken for the master's degree and beyond.

Hours of credit. A student must earn a minimum of 30 semestel hours of graduate credit beyond the master's degree. Credit earned in excess of that required for the master's degree may be applied toward the 30 -hour requirement if that credit is earned during the final semestel Certain limitations on the amount and kinds of credit must be observel
$\mathbf{2 0 0}$-level credit. A student must earn at least 24 semester hours of credit in courses numbered 200 or above, counting both the master's and the post-master's work but not counting any Research credit.

1. Research credit. For the thesis option, not more than 6 hourd of research credit (xox:299) can be included in the 30 (or morc) hours of post-master's credit. For the non-thesis option, not more than 3 hours of research credit (xxx:299) can be include) in the 30 (or more) hours of post-master's credit.
2. Recency of credit. Courses taken more than seven years pric to the granting of the degree cannot be used to meet degre? requirements.
3. Transfer credit In addition to the transfer credit permitted on the master's degree, 8 semester hours of transfer credit for posi, master's work may be applied toward the degree of Specialist in Education.
4. Correspondence credit. Correspondence (specified as "Guide" Independent Study" at UNI) courses may not ordinarily be ap1 plied toward a graduate degree program. In unusual circum stances a student may request that a maximum of 3 semeste hours of 100 g -level correspondence/UNI "Guided Independet Study" credit may be applied to a graduate degree progran" The request must be submitted to the Dean of the Graduat College prior to registering for the course.
5. Workshop crodit. No more than 6 hours of credit earned in workshop courses, at the University of Northern Iowa or and other institution, will be applied toward a graduate degree.

Scholarship. A cumulative grade index of 3.00 ( $B$ average) must be earned as a graduate student in all courses attempted in the program of study. No credit toward graduation is allowed for a course in which a grade below $\mathrm{C}(\mathrm{C}-, \mathrm{C}, \mathrm{C}+$ ) is earned.

On-Campus Residence. A student must have completed at least 18 hours in residence credit on campus, including one semester or two summer sessions of full-time enrollment in residence after the master's degree.

## Examinations.

(a) A student must pass a comprehensive oral examination, including a defense of the thesis, if required.
(b) A student may be required by the departmental committee to pass a written comprehensive examination. If required, it should precede the oral examination.
Thesis. A student who did not complete a thesis for the master's degree must complete one for the specialist's degree. A department may require a student who has written a master's thesis to write a thesis for the specialist's degree also. The thesis must be presented in the style and form prescribed for the master's thesis. It must have the approval of the thesis committee and the Dean of the Graduate College.

The work on a thesis will involve 6 hours of research credit (xoc: 299). To earn this credit, a student registers for research and usually not in one block. The instructor may assign a grade for a semester's registration in research based upon the progress made, or may assign a Research Continued ( $R C$ ) if the instructor feels the work has not reached the place where it can be evaluated. Registration for the last segment of research credit (for work on a thesis) should not be made until the thesis is near completion. The Registrar may authorize an extension of time for the completion of Research Continued ( $R C$ ) in research up to one additional calendar year with the consent of the instructor. If at the end of that time the work has not been completed, the grade of $R C$ will be changed to an $F$ (Failure).

Completion of the thesis project occurs when the thesis has been approved by the thesis committee and the Dean of the Graduate College.

The Dean of the Graduate College approves the appointment of three members of the Graduate Faculty as an advisory committee to guide the student in selecting and completing an appropriate thesis project.

Filing of Thesis. The student must present two copies of the thesis in final form, either originals or photocopies, to the Graduate College no later than six weeks before graduation. Failure to meet this deadline will result in a delay in graduation. The requirements for the preparation and filing of the thesis are set forth in the Thesis and Dissertation Manual. Copies of the manual may be obtained through the Graduate College office and should be consulted prior to beginning the thesis.

Final copies submitted to the Graduate College must be on white, acid free, 24 -pound, 25 percent or 100 percent cotton paper. The student may purchase the approved paper at the print centers in the Rod Library or the Physical Plant. The Rod Library Print Center is equipped to photocopy theses. The final copy must be clean and suitable for microfilming, with uniform darkness, and a sharp imprint.

When the thesis is submitted to the Graduate College, the student will present a receipt of payment for the cost of the thesis binding. This fee is paid at the Office of Business Operations. The student will also indicate to the Office of the Graduate College the name and edition of the style manual used in preparing the thesis. Consult the Thesis and Dissertation Manual for the list of approved style manuals.

Filing of Abstract of Thesis. An abstract or summary of the thesis is required of all students following the thesis plan toward the specialist's degree. The abstract will be approximately 350 words in length and is submitted with the thesis. Three copies of the abstract must be filed in the Office of the Graduate College.

Licensure. In some cases, appropriate teaching endorsement will be recommended for those who meet the standards set by the university in conjunction with the appropriate licensure agency. Receipt of the degree is not a necessary prerequisite to recommendation for the appropriate endorsement(s) unless state standards require such. A program graduafe grade point average of 3.00 or better will be required prior to recommendation for endorsement(s).

Application for Graduation. The same regulations apply as for the master's degree. A candidate for the Specialist or Specialist in Education degree must make application for graduation not later than the end of the ninth week of the semester or the fourth weak of the summer session in which s(he) plans to receive the degree. The application form may be secured in the Office of the Registrar or the departmental offices.

## Doctor of Education Degree

This program is intended to provide practicing educators the opportunity to continue their study and earn the terminal professional degree in their field. The Ed.D. degree requires a minimum of 60 semester hours of credit beyond the master's degree. The Graduate Record Examination (General Test) is required for admission to the program. There are three components to the program: 15 semester hours in a Professional Common Core of work in educational foundations, fundamentals, and research; 38 semester hours of Advanced Professional Study in one of four areas of intensive study and a related area; and a Dissertation of 7 semester hours.

By design, then, all students are required to study in basic areas that undergird and define educational practice and develop skills of problem definition, data collection and analysis, and interpretation. The four areas of intensive study provide for a specialized focus on practice. The four intensive study areas are: Curriculum and Instruction, Educational Leadership, Leisure, Youth and Human Services, and Special Education. (In some areas, it is possible to combine doctoral degree study with work toward an endorsement to perform a particular role in K-12 education.) Brief definitions of the four areas follow.

Curriculum and Instruction. This area of intensive study is designed to prepare scholar-practitioners to plan, implement, evaluate, and supervise educational programs for children and adult learners. (For more information, contact the Head, Department of Curriculum and Instruction.)

Educational Leadership. This area of intensive study involves the preparation of personnel for leadership roles in PK-12 schools, postsecondary institutions, and non-school educational settings, (For more information, contact the Head, Department of Educational Leadership, Counseling, and Postsecondary Education.)

Leisure, Youth and Human Services. This area of intensive study is designed to interpret and apply youth development models and concepts as well as nonprofit administrative practices to the planning, management, supervision and evaluation of informal education programs in the community. Graduates are prepared for careers as applied scholars, administrators of community nonprofit organizations, youth serving agencies, public parks and recreation, foundations, and government agencies. (For more information, contact the Coordinator, Leisure, Youth and Human Services Division, School of Health, Physical Education, and Leisure Services.)

Special Education. This area of intensive study is designed to provide students with a variety of leadership positions in public schools, higher education and human services agencies serving infants, children, youth and adults with disabilities. This program will center on preparing leaders who will be able to promote new meanings about diversity,
develop inclusive school cultures and instructional programs, and forge productive relationships between schools and their communities. (For more information, contact the Head, Department of Special Education.)

## Program Requirements: Doctor of Education

The program of study consists of three components: the Professional Common Core, Advanced Professional Studies, and the Dissertation. While there are discrete elements in the program, ideally all of the work should be seen as interrelated and focused on a professional career interest. The dissertation, especially, should be seen as an integrating, culminating experience rather than as an "add on" following course work.

## I. Professional Common Core (15 hours) Education Foundations 3 hours Interdepartmental Education: 190:301. <br> Research: <br> Interdepartmental Education: 190:303; 190:305; 190:307 9 hours <br> Measurement and Research: One of the following 250:270; 250:300; 250:301; 250:310. 3 hours

II. Advanced Professional Studies. 38 hours
This is the component of the program that relates to and supports the student's professional career goal. Students will elect one of four areas of intensive study. Specific course requirements for individual students will depend on faculty requirements and student background, interests, and goals. The only program limitations on work in this component are that the course work (including seminars, practica, independent readings, and independent research) be at the 200 - or 300 level except as allowed by the general regulations (pages 178-180), and that there be a minimum of 6 hours outside of the elected area of intensive study. The four areas of intensive study are:

Curriculum and Instruction
Educational Leadership
Leisure, Youth and Human Services
Special Education
III. Dissertation (7 hours)

This is the program component in which the student demonstrates proficiency in the integration of theory and practice (i.e., it involves the application of existing knowledge and/or results of individual research to an educational problem or situation). Required:

Doctoral Seminar: 190:389 ............................................ 1 hour
Dissertation Research: 190:399.................................. 6 hours 60 hours

## Admission to Doctoral Study

## Initial Admission

Formal application to doctoral study should be made to the appropriate intensive study area office, where descriptive materials and application packets may be obtained.

Admission to the program will be granted to those applicants who provide evidence of prior academic success; successful and appropriate professional experience; effective oral, written, and interpersonal communication skills; and professional and academic goals which may be
effectively served by the degree program offered. Additional criteria mat be established by an area of intensive study since some previous special ization work is presumed.

1. The applicant must hold a master's degree from a regionally accred ited institution of higher education.
2. Each applicant must submit transcripts of all previous academi work. Applicants with a grade point average of less than 3.50 for all prior graduate work will not usually be considered for regul admission.
3. Examinations. The following examination is required of student enrolled in the Doctor of Education program:

Graduate Record Examination. Students applying for admich sion to the Ed.D. degree program must have their verbal, analytical and quantitative sections of the Graduate Record Examination forwarded directly to the Office of the Registrar in order to be consid ered for degree status admission. The Graduate Record Examination is required in the doctoral intensive study areas of Curriculum and Instruction, Educational Leadership, and Leisure, Youth and Humam Services.

The doctoral intensive study area in Special Education required a written statement from each applicant as part of the total applica, tion packet. The written statement should articulate the applicant professional background, reasons for seeking the doctoral degre, and a statement of career goals. Also required is a sample of professional writing that will be formally assessed. The professiond writing sample may consist of a master's research paper or thesith published article, a paper prepared for presentation at a professional conference, or similar document. The Graduate Record Examinal tion is not required.
4. The applicant must have a minimum of three years of professiond educational experience.
5. Three letters of recommendation must be submitted from individu als familiar with the applicant's potential for advanced professiond study, at least one from a professor familiar with the applicant as a student and at least one from an educational employer/supervisor
6. Applicants for whom English is not their first language must complete the Test of English as a Foreign Language Examinatiod (TOEFL) and check with their desired intensive study area regardin acceptable scores.

Provisional degree status may be recommended for an appliy cant who does not meet all of the requirements or for whom it is felt .that further graduate course work or professional experience would be useful in making the admission decision. Provisional degre, status will not be considered for applicants whose admission files are incomplete. An individual admitted to provisional degree status must be formally reconsidered for regular admission, and course, work completed during that time must be subsequently approvel by an appropriate faculty committee before it may be applied to a degree.

## Candidacy Status

Soon after full admission, an advisor will be appointed for eachlif student. In most instances, the advisor will be from the student's area of intensive study. Prior to the completion of 15 semester hours of cours, work toward the doctorate at the University of Northern Iowa, the student will meet, with the advisor and develop a program of study for suby mission to the Graduate College. Approval of the program of study will signify admission of the student to candidacy status.

## General Regulations

1. Scholarship. A cumulative grade point average of 3.00 or above ( OH
a 4.00 scale) must be maintained for all course work taken toward the Doctor of Education Degree at the University of Northern Iowa. No more than 6 semester hours of C credit (C-, C, C+) earned within the program of study may be applied toward credit for graduation.
2. Recency of credit. Courses taken more than seven years prior to the granting of candidacy status cannot be used to meet degree requirements.
3. Credit from Other Institutions. Usually a maximum of 15 hours of credit from regionally accredited graduate institutions may be applied toward meeting the minimum credit hour requirements for the Doctor of Education degree (subject to the Recency of Credit regulation). Usually not more than 3 hours of acceptable transfer credit may be applied toward any given subcomponents of the Professional Common Core. (See Program Approval on page 142.)

All transfer credit, including work taken prior to formal admission, is subject to review by the Office of the Dean of the Graduate College, Office of the Dean or Associate Dean of the College of Education, and the College Committee for Doctoral Study. The student's doctoral advisor will make recommendations regarding the applicability of transfer credit.

A student can apply toward a doctorate a combined maximum of 15 hours of transfer credit and a second or third master's, or specialist degree credit (maximum of 6 hours).
a. Transfer credit. Usually a maximum of $\mathbf{1 5}$ hours of credit from regionally accredited graduate institutions may be applied toward meeting the minimum credit hour requirements for the Doctor of Education degree, subject to the Recency of Credit regulation. Hours that have been applied to meet the requirements of another degree cannot be transferred.
b. Master's degree credit. A maximum of 6 hours of graduate credit applied to meet the requirements of a second or third master's degree may be applied toward the doctorate, subject to the Recency of Credit regulation. These hours must be approved by the Chair of the Intensive Study Area and the Department Head.
4. Residence credit. Following admission to the Doctor of Education program, the student shall be enrolled for at least two courses from the approved program of study for each of two on-campus semesters.
5. Maximum academic load. The maximum graduate load during an academic year semester is 15 hours; for the eight-week summer session, 9 hours is the normal maximum - a maximum of 6 hours during one four-week period and 3 hours during the other fourweek period; or 3 three-hour courses during an eight-week period. The maximum load during a two-week post-session is 2 hours. Exceptions to these load restrictions may be granted only by the Dean of the Graduate College.
6. Level of courses. Credit earned as part of the candidate's program of study will be earned in courses which are at the graduate level. A minimum of 50 hours of course work at the $\mathbf{2 0 0}$ - or $\mathbf{3 0 0}$-level must be completed. No more than 10 hours of credit at the 100 g level (upper-level undergraduate and lower-level graduate) may apply toward this program of study.
7. Examinations. The following examinations are required of all students enrolled in the Doctor of Education program:
a. Doctoral comprehensive examination. The candidate requests permission to take the comprehensive examination through the Intensive Study Area office. Normally, such a request is made during the term prior to the administration of the comprehensive examination. The doctoral comprehensive examination is governed by the following conditions:

1) The candidate will have completed 80 percent of her/his program of study.
2) The candidate will have satisfied the research proficiency requirement.
3) The examination is prepared within the guidelines established by the ISA.
4) A candidate may be permitted to take the doctoral comprehensive examination a second time.
Note: Upon successful completion of the Doctoral Comprehensive Examination, the degree candidate achieves the status of active candidate.

Post-comprehensive registration: Doctoral students who have completed all of their program but the dissertation, and who have passed their comprehensive examination must be continuously registered until the degree is completed. Students reaching this stage will be automatically registered and assessed a fee for 190:300, the post-comprehensive "course" registration number.
b. Doctoral dissertation examination. Upon completion of her/ his doctoral dissertation, the active candidate will request and submit to a public examination over the content, design, and methodology used in conducting the dissertation research.
8. Doctoral dissertation proposal. The student, in conjunction with her/his advisor, should make arrangements to present the dissertation proposal to the doctoral committee as a group. The membership of the committee will include at least one member from outside the College of Education appointed by the Graduate Dean. Formal work on the dissertation may not proceed without approval from this committee.
9. Time limitation. The program of study for the Doctor of Education degree must be completed within seven calendar years from the date that admission to candidacy is granted. Extensions in this time requirement should be the exception and will be granted only for good cause. Such extensions may be granted by the Dean of the Graduate College.
10. Preview. During the semester in which the student intends to graduate, the student must make an appointment with the Graduate College for a dissertation preview to have the style and format of the dissertation reviewed. The student must have an approved program of study (GF-1) on file in the Graduate College with the members of the dissertation committee listed before a preview meeting will be scheduled. All problems may not be detected during the preview; however, the major difficulties will be discussed. Often a brief consultation will uncover format problems that are easily remedied at this stage. No dissertation will be accepted by the Graduate College for final approval without the completion of this meeting.
11. Filing of dissertation. A dissertation is required of all candidates for the Ed.D. degree. It will involve 7 hours of credit. The first one hour will be Dissertation Seminar. Regulations governing the physical appearance (format) may be obtained from the Graduate College. The dissertation must be in final copy form before doctoral committee members may affix their signatures for approval.

The student must present three unhound copies of the dissertation in final form, either originals or photocopies, to the Graduate College no later than six weeks hefore graduation. Failure to meet this deadline will result in a delay in graduation. The requirements for the preparation and filing of the dissertation are set forth in the Thesis and Dissertation Manual. Copies of the manual may be obtained through the Graduate College and should be consulted prior to beginning the dissertation. Final copies submitted to the Graduate College must be on white, acid free, 24 -pound, 25 percent or 100 percent cotton paper. The student may purchase the approved paper at the print centers in the Rod Library or the Physical Plant. The Rod Library Print Center is equipped to
photocopy dissertations. The final copy must be clean and suitable for microfilming, with uniform darkness and a sharp imprint.
12. Abstracts of dissertation. Three copies of an abstract of the dissertation must be filed in the Graduate College Office at the time of final deposit of the dissertation. Regulations for the dissertation also apply to the abstract. The abstract must not exceed 350 words in length. Please see the most current edition of Thesis and Dissertation Manual, for details.
13. Microfilm agreement. $A$ "Microfilm Agreement" and "Survey of Earned Doctorates" must be completed and returned to the Graduate College with the final dissertation.

The University of Northern lowa participates in a program sponsored by the Association of Research Libraries and conducted by University Microfilms, Ann Arbor, Michigan, for reproduction of doctoral dissertations on microfilm. If the dissertation has been copyrighted, this information must be included on the university agreement form.
14. Dissertation fees. Several fees are required in connection with the dissertation; these include:
a. a binding fee for the library and department copies of the dissertation. If a student wishes to bind additional copies, individual arrangements with a binder must be made.
b. a microfilm fee to cover the cost of microfilming the dissertation and publishing the abstract.
c. a copyright fee if the student wishes to have the dissertation copyrighted.
Students should check with the Graduate College office or the most current edition of the Thesis and Dissertation Manual, for the amount of each of the above fees.

The binding, microfilming, and copyrighting fees must be paid at the UNI Office of Business Operations and a copy of the receipt submitted to the Graduate College at the time the final copy of the dissertation is deposited.
15. Application for graduation. Candidates for the Doctor of Education degree must make application for graduation on appropriate university forms. These forms may be obtained from the Office of the Registrar or departmental office. An active candidate must file application for graduation not later than the end of the ninth week of the semester or the fourth week of the summer session in which $s(h e)$ plans to receive the degree.
16. Attendance at commencement. The candidate for the Doctor of Education degree is expected to secure the appropriate academic regalia and appear at commencement for the awarding of the degree.

## Doctor of Industrial Technology Degree

The University of Northern Iowa offers the Doctor of Industrial Technology degree to meet the increasing need for advanced degree work in this field. Industrial technology is a relatively new and rapidly expanding knowledge base for a wide variety of professional fields: these include technology, trade and industrial education, technical institute education, industrial training, and technology transfer. This research-oriented degree program also includes the study of the technological systems used in industry and their effect on society and culture.

The Doctor of Industrial Technology degree is designed to develop scholars in the fields of education and industry. Programs emphasize the development of a thorough knowledge of (a) industrial technology as an intellectual discipline, (b) the technological systems used in industry and their effect on people and the environment, and (c) the potential and limitations of future developments in technological systems and their utilization in industry. Program emphasis is on providing the intellectual
tools necessary to pursue scholarly research and applied practices in the field of industrial technology. Efforts will be made to develop in each student the interest and desire required for a leadership role in improvim/ educational and industrial programs and determining directions for future programs. The degree program requires a minimum of 64 semester hours of credit completed beyond the master's degree.

The Doctor of Industrial Technology degree program is intended to prepare graduates for one or more of the following professional careers:

1. Faculty, supervisors, and consultants of industrial technology, trade and industrial education, technical institute education and technol $\sqrt{ }$ ogy education in secondary schools, colleges and universities.
2. Researchers and project coordinators, technology transfer special, ists, technology forecasters and assessors of technology for industrial, policy planning and decision making.
3. Leaders (e.g., deans, department heads, or directors) of technology oriented programs at postsecondary institutions.
4. Researchers and research coordinators for education and industry in specific content fields of industrial technology.
5. Designers, coordinators and directors of industrial training or human resource programs, and related industrial applications.

## Program Requirements: Doctor of Industrial Technology

It is the student's responsibility to be familiar with all degree program requirements and take the initiative in meeting established guidelines. This information may be obtained from the Graduate Programs|| Coordinator in the Department of Industrial Technology.

## Required core program:

Industrial Technology foumdations. $\qquad$ 12 hours
Industrial Technology: 330:375; 330:376; 330:377; 330:378
Seminars $\qquad$ 4 hours
Industrial Technology: 330:282 (3 hrs.).
(Students must enroll in a one-hour seminar during the first three sessions on campus.)
Industrial Technology: 330:283 (1 hr.)
Research, Statistical Methods ........................................... 9 hours
Measurement and Research: 250:180.
Industrial Technology: 330:292; 330:296.

Industrial Technology: 330:388.
Diseertationt.........................................
Industrial Technology: 330:399.
Supporting course work
12 hours
Supporting course work may be taken from any discipline
in the university as long as it relates to the career goals
and competencies identified on the program of study and
is approved by the student's faculty advisory committee.
A minimum of 8 hours of supporting course
work, beyond the required core program, must be taken outside the Department of Industrial Technology.

64 hours

## Admission to Doctoral Study

## Application for Admission

Individuals possessing the master's degree in Industrial Technology| Technology Education, Technology or a related technical program, from any accredited institution may apply for admission to the Doctor of Industrial Technology degree program.

Applicants in the final semester or summer session of work on the master's degree may submit application materials and be admitted on
provisional degree status until the master's degree notification is received in the Office of the Registrar.

## Types of Admissions

Admission to the Doctor of Industrial Technology degree program may be granted on a degree status or provisional status basis.

## 1. Degree Status Admission.

a) The applicant must hold a master's degree with an education or industry specialization in a content field in or related to industrial technology; the degree must have been granted by a nationally accredited institution or internationally reputable institution.
b) Each applicant must have an overall grade point average of $\mathbf{3 . 2 0}$ on all prior graduate course work.
c) The applicant must have completed the Graduate Record Examination (GRE) and have her/his percentile scores forwarded directly from the testing agency to the Office of the Registrar. These scores must rank in the $30^{\text {th }}$ percentile or higher for each of the verbal, analytical, and quantitative sections. The department will not be able to make an admission decision (degree status or provisional) until official GRE scores are on file.
d) Three references from persons familiar with the academic and professional potential of the applicapt must be submitted.
e) Applicants for whom English is not their first language must complete the Test of English as a Foreign Language Examination (TOEFL) and achieve a score of at least 575 (paperbased)/230 (computer-based).
f) Each applicant must have a minimum of three years of profes-sional-level educational or industrial experience in/or related to the major field of specialization. Individuals without this experience may be admitted to the program but appropriate professional experience must then be included in the program of study. What constitutes appropriate professional experience will be determined by the student's faculty advisory committee and this requirement will be included in the student's program of study.
g) All applications for admission will be reviewed by the Department of Industrial Technology Graduate Programs Committee. The committee may recommend degree status only if the candidate meets all the above requirements.

## 2. Provisional Degree Status.

a) Provisional degree status admission may be recommended if an applicant does not meet all the above requirements or if the committee believes further graduate course work or professional experience is desirable prior to an applicant's being approved for degree status admission. (See guidelines regarding provisional status.) The committee may require a personal interview with an individual before taking action on an application for admission.
b) Applicants admitted on provisional status must meet one or both of the following criteria before they may be reconsidered for degree status.

1) Completion of all deficiencies for admission to degree status.
2) Completion of 9 hours for a summer session or 12 hours during a spring or fall semester with a minimum grade point average of 3.20 in course work recommended by the faculty advisor appointed by the department head. Course work completed while the individual is on provisional degree status admission may be applied toward degree requirements only if it is approved by the faculty advisory

> committee assigned to the student.

## Faculty Advisory Committees

After admission has been granted, a faculty advisory committee will be appointed by the Graduate Dean in consultation with the Head of the Department of Industrial Technology. The student and the faculty advisor will be responsible for recommending members for appointment to the faculty advisory committee. The student should then specify in a letter to the Graduate Coordinator the rationale for each graduate faculty member recommended to serve on the committee. The committee will consist of three members from the Department of Industrial Technology and two members from outside the department, one of whom will be a representative of the Graduate College assigned by the Graduate Dean. Eligible committee members from within the Department of Industrial Technology will serve as chair and co-chair. The five committee members must be members of the University of Northern Iowa Graduate Faculty. An expansion of the committee may occur if a non-faculty person agrees to serve due to expertise or as a representative of an area of knowledge. Approval shall comprise a written petition submitted in the normal procedure. Non-faculty personnel will participate in all committee responsibilities except for signature decisions. This advisory committee shall have the responsibility for the following:

1. Approval of the application for candidacy (Professional Career Development Plan) and the Application for Program Approval or program of study (GF-1 form) for the individual student.
2. Personal interview with student after completion of the Professional Career Development Plan (PCDP).
3. Preparation and evaluation of comprehensive written and oral examinations.
4. Determination of any remedial requirements after comprehensive written and oral examinations are completed.
5. Approval of publication requirement before allowing student to submit dissertation proposal.
6. Approval of dissertation proposal and supervision of dissertation effort.
7. Final approval of completed dissertation.
8. Preparation and evaluation of oral examination over dissertation.
9. Recommendation of candidate for degree.

All but one of the voting committee members must approve all actions of the committee.

Should it then be necessary to request changes in the composition of the committee, the graduate student must specify in a letter to the departmental Graduate Coordinator the rationale for the replacement. A disagreement in perspective, thought, or position may not be cause for replacement. Any faculty member choosing to resign from the committee must submit a letter of request to the departmental Graduate Coordinator.

## Admission to Candidacy

Students will usually apply for admission to candidacy and submit programs of study for approval during their first semester or second summer session in residence. All course work in progress or completed prior to applying for admission to program approval must be subsequently approved by the faculty advisory committee in order to be counted on a student's program of study.

Admission to candidacy will be recommended to the department head only after a formal interview of the student has been conducted by the faculty advisory committee.

Any changes made in course requirements after the application for program of study has been submitted must be approved by the faculty advisory committee and the Dean of the Graduate College.

## General Regulations

1. Scholarship. A cumulative grade index of $\mathbf{3 . 0 0}$ (B average) must be earned at the University of Northern lowia in all courses attempted as a graduate student. No credit toward graduation will be allowed for courses in which the earned grade is below C - and ${ }^{\circ} \mathrm{a}$ maximum of 6 hours of $\mathbf{C}$ credit (C-, C, C+) earned within the program of study may be applied toward credit for graduation.
2. Recency of credit. Courses taken more than seven years prior to the granting of the degree cannot be used to meet degree requirements.
3. Credit from other institutions. A student can apply toward the doctorate either transfer credit (a maximum of 12 hours) or credit from a second or third master's degree (maximum of 6 hours), but not both or any combination of the two.
a. Transfer credit. Usually a maximum of 12 semester hours of graduate credit from other accredited institutions may be applied toward meeting minimum credit hour requirements for the Doctor of Industrial Technology degree, subject to the recency of credit regulation. Hours that have been applied to meet the requirements of another degree cannot be transferred.

Credit may not be transferred if taken four years prior to application for admission to the Doctor of Industrial Technology degree program, taking into consideration three years for degree completion. The student's faculty advisory committee will make recommendations regarding the applicability of transfer credit. (See program approval on page 142.)
b. Master's degree credit. $A$ maximum of 6 hours of graduate credit applied to meet the requirements of a second or third master's degree may be applied toward the doctorate, subject to the Recency of Credit regulation. These hours must be approved by the Doctor of Industrial Technology Advisory Committee or the Graduate Programs Committee and the department head.
4. Residence credit. The student must be enrolled in continuous, fulltime study for one academic year plus the preceding or following summer session. The student shall be enrolled for a minimum of 18 hours of credit which may be distributed across three semesters over two consecutive academic years. Persons serving as graduate assistants in the department will be considered full-time if they carry at least 9 hours per semester in addition to the assistantship. Dissertation research will not be used to satisfy the residency requirement.
5. Maximum academic load. The maximum graduate student load during each semester of the academic year is 15 hours, and 12 hours for those with an assistantship; that permitted during the eight-week summer session is 9 hours and during the two-week post-session, 2 heurs.
6. Level of courses. A minimum of 38 hours must be in 200 - or 300 -level course work All $100(\mathrm{~g})$ series courses available in the Department of Industrial Technology require activities beyond those required for undergraduate students; and some courses require activities for doctoral students beyond those required of pre-doctoral students.
7. Professional Career Development Plan (PCOP). The candidate consults with the chairperson of the advisory committee in the development of the Professional Career Development Plan which requires approval by the candidate's faculty advisory committee. The PCDP includes a statement of the candidate's career goals, a compilation of the competencies and other skills already possessed along with supporting evidence, and a proposed plan of study to achieve the remaining career goal competencies. It requires both a written component and an oral interview. The PCDP. must be completed
early in the first or second semester or summer session in residend 8. Examinations. The following examinations are required of all students working toward the Doctor of Industrial Technology degrea.
a. Graduate Record Examination. Students applying for admission to the D.I.T. degree program must have their verbet analytical, and quantitative sections of the Graduate Record Examination forwarded directly to the Office of the Registra in order to be considered for degree status admission. Theif percentile scores must rank in the $30^{\text {th }}$ percentile or higher for each of the verbal, analytical, and quantitative sections of the Graduate Record Examination.
b. D.I.T. comprehensive examination. The comprehensive examination is intended to be an evaluation of the candidate's mastery of the entire planned program of study, including the tool of research. It is used to evaluate the candidate's mastery of the subject at or near the end of the program but prior to initiatind the research activity for the dissertation. It should be prepared administered, and evaluated by the candidate's faculty advisors committee upon completion of all core program requirement excluding dissertation research work, and upon the comple tion of at least 80 percent of the proposed elective courses in the program. The written portion will consist of three 4 -how periods. The dates will be scheduled in consultation with the advisor. Upon satisfactory completion of the written portios the faculty advisory committee will conduct the oral portio with the candidate present. The oral portion shall be opened to faculty who provided questions for the written portion.

Successful completion of both the written and oral portions of the comprehensive examination are required. The comprehensive examination will be evaluated at a convened meeting of the faculty advisory committee and reported as satisfactory or unsatisfactory to the Graduate Dean via the Graduate Coordinator and Head, Department of Industrial Technology.

In the event of a report with three or more votes of "satia" factory with reservations" in either portion, the exact stipula tions of the committee should be recorded on the report form The statement must specify the time allowed for satisfying the stipulations and must be specific in defining the area if furthed examination in a particular area is necessary, or in describinf any additional courses, actions or procedures that are required The examination cannot be deemed complete or reportable until such stipulations have been satisfied.

Successful completion of the comprehensive examination will be reported if four of five committee members indicate a satisfactory report on both the written and the oral portions. In case of a report of unsatisfactory on a portion of the examinay tion, a second examination must be administered in the next succeeding semester or summer session. A candidate will be permitted two opportunities to achieve a satisfactory report. A third opportunity will only be allowed with a special approval by the department head upon the recommendations of four of the five members of the faculty advisory committee. The candidate receiving an unsatisfactory report in the final opportunity by the convened faculty advisory committee will not be permitted to continue or complete the program of graduat studies, and upon submission of the report form to the Headl Department of Industrial Technology, and Graduate Dean via the Graduate Program Coordinator, the faculty advisory committee for this candidate will be dissolved.

Post-comprehensive registration: Doctoral student who have completed all of their program requirements excep?
the dissertation, and who have passed their comprehensive exam must be continuously registered until the degree is completed. Students reaching this stage will be automatically registered and assessed a fee for 330:300, the post-comprehensive course registration number.
c. Dissertation Examination. An oral examination is required over the content and methodology used in conducting the research associated with the student's dissertation. The examination is conducted by the student's faculty advisory committee after the dissertation has been presented to the faculty advisory committee in final form.
9. Publication. Before being allowed to submit a dissertation proposal, the student must submit at least one scholarly paper for publication in a periodical, journal, or textbook within one of the professional fields related to industrial technology. The faculty advisory committee shall determine when this requirement is met. Publication completed prior to admission to the program may be submitted for consideration.
10. Dissertation. A minimum of four final copies of the accepted dissertation are required to be delivered to the Office of the Graduate Dean no later than two weeks before graduation. The original and three copies of the dissertation must be on white, acid free, 24pound (minimum weight), 25 percent or 100 percent cotton paper (erasable paper is not acceptable). The student may purchase the approved paper at the print centers in the Rod Library or the Physical Plant. The Rod Library Print Center is equipped to photocopy dissertations. The final copy must be clean and suitable for microfilming with uniform darkness and a sharp imprint. In addition, two copies should be delivered to the department office.
11. Abstracts of dissertation. Three copies of an abstract of the dissertation must be filed in the Graduate College at the time of final deposit of the dissertation. Regulations for the dissertation also apply to the abstract. The abstract must not exceed 350 words in length. Please see the most current edition of the Thesis and Dissertation Manual (obtainable from the Graduate College) for details.
12. Microfilm agreement. A Microfilm Agreement" and "Survey of Earned Doctorates" must be completed and returned to the Graduate College with the final dissertation. The University of Northern lowa participates in a program sponsored by the Association of Research Libraries and conducted by University Microfilms, Ann Arbor, Michigan, for reproduction of doctoral dissertations on microfilm. If the dissertation has been copyrighted, this information must be included on the university microfilm agreement form.
13. Dissertation fees. Several fees are required in connection with the dissertation; these include:
a. a binding fee for the two library and two department copies of the dissertation. If a student wishes to bind additional copies, individual arrangements with a binder must be made.
b. a microfilm fee to cover the cost of microfilming the dissertation and publishing the abstract.
c. a copyright fee if the student wishes to have the dissertation copyrighted.
Students should check with the Graduate College for the most current edition of the Thesis and Dissertation Manual for the amount of each of the above fees.

The bihding, microfilming, and copyrighting fees must be paid at the UNI Office of Business Operations and a copy of the receipt submitted to the Graduate College at the time the final copies of the dissertation are deposited.
14. Credit hour requirements. A minimum of 64 semester hours of credit must be completed beyond the master's degree. At least 52 hours of these credits must be earned at the University of Northern
lowa. At least 38 of the credit hours used for meeting minimum credit hour requirements for the degree must be in 200 - or 300 -level course work.
15. Research requirements. A dissertation is required of all candidates. Research credit of 12 semester hours will be granted for the successful completion of the dissertation. Students may register for the research courses after successful completion of the research methods courses noted in their doctoral program. The instructor of these courses, or advisor, may assign an RC (Research Continued), if $s$ (he) feels the work has not reached the stage where it can be evaluated. Registration for the last segment of research credit for which a student registers (for work on her/his dissertation) should be postponed until the paper is near completion. The Registrar may authorize the extension of time for completion of an RC (Research Continued) in research up to one additional calendar year with the consent of the instructor. If at the end of that time the work has not been completed, the RC will be changed to an $F$ (Failure). All dissertation research credit is recorded as $R C$ (Research Continued) until the faculty advisory committee has conducted the final oral examination over the dissertation and given final approval for the dissertation.
16. Filing of dissertations. The dissertation must be submitted in final form to the faculty advisory committee at least seven weeks prior to graduation. Regulations governing the preparation of dissertations may be obtained from the Graduate College.
17. Application for graduation. The candidate for the Doctor of Industrial Technology degree must make application for graduation not later than the ninth week of the semester or the fourth week of the summer session in which the student plans to receive the degree. The application form may be obtained in the Department of Industrial Technology. Applications received after the dates designated will be placed with those for the following session.
18. Attendance at commencement. The candidate for the Doctor of Industrial Technology degree is expected to secure the appropriate academic regalia and appear at commencement for the awarding of the degree.

## Courses of Instruction

In the following pages, courses are designated by two numbers, separated by a colon. The first number refers to the department or area of the course; the second number refers to the specific course. For example, in the course designated $600: 111$ the " 600 " refers to the Department of Art and the " 111 " refers to the course. In registration always use the full number.

Courses 0-99 are primarily designed for freshman and sophomore students.

Courses 100-199 are primarily designed for junior, senior, and graduate students. However, only those 100 -level courses whose numbers are followed by a " 8 " provide graduate credit, e.g., $400: 173(\mathrm{~g})$. In all courses of the $100(\mathrm{~g})$ series, greater academic achievement, both qualitative and quantitative, is expected of those receiving graduate credit than those receiving undergraduate credit. Freshmen and sophomores may not register for $100(\mathrm{~g})$-level courses. Only in very special cases may an exception be granted by the appropriate department head.

Courses 200-299 are primarily designed for graduate students. Undergraduates seeking admission to graduate courses must secure the permission of the head of the department offering the course. Courses numbered 200 taken as an undergraduate cannot later be used for an advanced degree unless the student was eligible to earn graduate credit. See pages 61-62.

Courses 300-399 are primarily designed for doctoral students.
Students are classified as follows:
Earned Semester Hours
Freshman ..less than 30
Sophomore 30-59
$\qquad$
Senior ............................................................................ 90 and over Graduate classification is earned by admission to graduate study.

## Semester Designation for Courses

Each course description has a semester(s) designation indicating when it is typically offered. The semester designation is listed at the end of each course description in parenthesis - i.e., (Offered Fall and Spring), (Offered even Springs), (variable), etc. Every effort will be made to abide by the designations, but this is not a guarantee that the course will be offered as indicated.

## Course Numbers Common to Many Departments

These common numbers may be used under named conditions by prefixing the department number:

059, 159, 159g, 259 -Reserved for temporary courses of a special or experimental nature.

133, 133g, 233 Workshop-1-6 hrs. Offered for special groups as announced in advance. Students may take work in one or more workshops but may not use more than 6 hours toward graduation.

179 Cooperative Education-1-6 hrs. For students who wish to apply classroom learning to field experience. Requires approval by the faculty supervisor, the head of the academic department granting credit, and Cooperative Education/Internship staff for placement agreement, project, and credit arrangements. Credit may not be applied to a major or minor without approval by the department offering the major or minor. Co-op/Internship staff assist in developing placements and arranging student interviews with employers and maintain contact with student and employer during the co-op/internship experience. May be repeated
for a maximum of 12 hours credit. (See page 60.)
086, 186, 186g, 286 Studies in " $\qquad$ "- Courses to be offered by departments for specialized work not covered by regular courses. Credif and topic for "study" to be given in Schedule of Classes.

09C, 19C, Open Credit-1-6 hrs. (See page 60.)
19P Presidential Scholars Research - 1-3 hrs. For Presidential Scholars only. Credit and topic to be approved by the Presidential Schola ars Board. May be repeated once for a maximum of 6 hours.

198 Independent Study-Hours to be arranged in advance. A provis sion for undergraduate students to do work in a special area not offerch in formal courses. (Does not provide graduate credit.) Permission of the head of the department offering the work is required. Projects must be approved well before the beginning of the semester in which the work to be done. (See pages 60-61.)

199 Study Tour-1-12 hrs. Offered as announced in the Summe Bulletin and Schedule of Classes. See Summer Bulletin for general description and consult appropriate department for specific informatiould

285 or $\mathbf{3 8 5}$ Readings - Offered as needed in the various disciplin! - not offered as a class. Independent readings from a selected list as approved in advance by department head. Credit to be determined at time of registration.

289 or 389 Seminar-Offered as needed in the various disciplint Credit and topic to be given in Schedule of Classes.

29R Directed Research-1-12 hrs. Course is available to thesis and non-thesis students on a credit/no credit basis. Students may enroll in the course following enrollment in all allowable hours of xxx:299 (6-9 hours for thesis students and 3 hours for non-thesis students). Students may take this course for a maximum of 6 hours per semester. Please refer to individual programs for possible exceptions.

297 or 397 Practicum-2-3 hrs. Offered as needed in the variou disciplines to provide practical experience in college teaching.

299 or 399 Research-For details of approval and registration, see pages 144, 176, 179 and 182-183.

300 Post-Comprehensive Registration

## Individual Studies Program

Courses offered in the Individual Studies Program may have a prefis of $000: 0 x$ instead of a department number. These include:

192 Exploratory Seminar-1-3 hrs.
196 Interdisciplinary Readings-1-3 hrs.
197 Undergraduate Thesis-3-6 hrs.
198 Individual Study Project—Hours arranged by Individual Stud4 ies Program Coordinator. (See pages 8-9 and 102 for additional informall tion.)


## Guide to Course <br> Numbers

## Alphabetical Order

120 Accounting
990 Anthropology
600 Art
42 T Athletic Training
840 Biology
100 Business Administration,
Interdepartmental
860 Chemistry
710 Chinese
48. Communication Studies: 48C (Communication) 48 E (Electronic Media) 48) (Journalism) 48P (Public Relations)
51_ Communicative Disorders: 51C (Communicative Disorders) $51 S$ (Speech-Language Pathology)
810 Computer Science
290 Counseling
310 Design, Family and Consumer Sciences: $31 F$ (Family Services/Family Studies) 31G (Gerontology) 311 (Interior Design) 31 (Textile and Apparel)
870 Earth Science
920 Economics
190 Education, Interdepartmental
270 Educational Leadership
200 Educational Psychology
210 Elementary, Early Childhood, and Middle Level Education
620 English Language and Literature
830 Environmental Science
160 Finance
720 French
970 Geography
740 German
440 Health, Physical Education, and Leisure Services, Interdepartmental
410 Health Promotion and Education 960 History
680 Humanities
690 Humanities, Interdepartmental
000 Individual Studies
330 Industrial Technology
240 Instructional Technology
890 Iowa Lakeside Laboratory
730 Japanese
700 Languages
430. Leisure, Youth and Human Services

230 Literacy Education
150 Management
130 Marketing
800 Mathematics
250 Measurement and Research
080 Military Science
520 Music
540 Music, Applied
570 Music Education and Methods
590 Music History and Musicology
530 Music Organizations and Ensembles
560 Music Techniques
580 Music Theory
595 Performance Literature and Repertory
650 Philosophy
880 Physics
420 Physical Education
94_ Political Science:
940 (Political Methodology)
941 (Political Theory)
942 (American Politics)
943 (International Relations)
944 (Comparative Politics)
790 Portuguese
170 Postsecondary Education: Student Affairs
400 Pathology
950 Public Policy
640 Religion
770 Russian

300 Safety Education
350 School Library Media Studies
820 Science and Science Education
260 Social Foundations
900 Social Science
450 Social Work
980 Sociology
780 Spanish
220 Special Education
280 Teaching
630 TESOL/Applied Linguistics
490 Theatre
43T Tourism
010 University, Interdisciplinary
43Y Youth and Human Service Administration

## Code Number Order

000 Individual Studies
010 University, Interdisciplinary
080 Military Science
100 Business Administration, Interdepartmental
120 Accounting
130 Marketing
150 Management
160 Finance
170 Postsecondary Education: Student Affairs
190 Education, Interdepartmental
200 Educational Psychology
210 Elementary, Early Childhood, and Middle Level Education
220 Special Education
230 Literacy Education
240 Instructional Technology
250 Measurement and Research
260 Social Foundations
270 Educational Leadership
280 Teaching
290 Counseling
300 Safety Education
310 Design, Family and Consumer Sciences $31 F$ (Family Services/Family Studies) 31G (Gerontology) 311 (Interior Design) $31 T$ (Textile and Apparel)
330 Industrial Technology
350 School Library Media Studies
400 Psychology
410 Health Promotion and Education
420 Physical Education
42T Athletic Training
430 Leisure, Youth and Human Services
43 T Tourism
43Y Youth and Human Service Administration
440 Health, Physical Education and Leisure Services, Interdepartmental
450 Social Work
48_ Communication Studies:
48C (Communication)
48E (Electronic Media)
48) (Journalism) 48P (Public Relations)
90 Theatre
51_ Communicative Disorders: 51C (Communicative Disorders) 5IS (Speech-Language Pathology)
520 Music
530 Music Organizations and Ensembles
540 Music, Applied
560 Music Techniques
570 Music Education and Methods 580 Music Theory
590 Music History and Musicology
595 Performance Literature and Repertory 600 Art
620 English Language and Literature
630 TESOL/Applied Linguistics
640 Religion
650 Philosophy
680 Humanities
690 Humanities, Interdepartmental 700 Languages

710 Chinese
720 French
730 japanese
740 German
770 Russian
780 Spanish
790 Portuguese
800 Mathematics
810 Computer Science
820 Science and Science Education
830 Environmental Science
840 Biology
860 Chemistry
870 Earth Science
880 Physics
890 Iowa Lakeside Laboratory
900 Social Science
920 Economics
94_ Political Science
940 (Political Methodology)
941 (Political Theory)
942 (American Politics)
943 (International Relations)
944 (Comparative Politics)
950 Public Policy
960 History
970 Geography
980 Sociology
990 Anthropology

## Departmental Order

Accounting
120 Accounting
Art
600 Art
Bielegr
840 Biology
890 Iowa Lakeside Laboratory
Business Administration, Collage of, Interdepartmental
100 Business Administration, Interdepartmental

## Chemistry

860 Chemistry
Communication Studies
48C (Communication)
48E (Electronic Media)
48] (Journalism)
48P (Public Relations)
Communicative Disorders
51C Communicative Disorders
51 Speech-Language Pathology
Computer Science
810 Computer Science
Curriculum and Instruction
210 Elementary, Early Childhood, and Middle Level Education
230 Literacy Education
240 Instructional Technology
300 Safety Education
350 School Library Media Studies
Design, Family and Consumer Sciences
310 Design, Family and Consumer Sciences
$31 F$ (Family Services/Family Studies)
31G (Gerontology)
311 (Interior Design)
31 T (Textile and Apparel)

## Earth Science

870 Earth Science
Economics
920 Economics
Education, Interdepartmental
190 Education, Interdepartmental
Educational Leadership, Counseling, and Postsecondary Education
170 Postsecondary Education: Student Affairs
270 Educational Leadership
290 Counseling
Educational Piychology and Foundations
200 Educational Psychology
250 Measurement and Research
260 Social Foundations
English Language and Literature
620 English Language and Literature

630 TESOL/Applied Linguistics
Finance
160 Finance
Geography
970 Geography
Health, Physical Education, and Leisure Services, School of
410 Health Promotion and Education
420 Physical Education
42 T Athletic Training
430 Leisure, Youth and Human Services
43 T Tourism
43 Y Youth and Human Service Administration
\$40 Health, Physical Education, and Leisure Services, Interdepartmental
History
960 History
Humanities
680 Humanities
Humanities and Fine Arts. Interdepartmental
690 Humanities, Interdepartmental
Interdisciplinary
000 Individual Studies
010 University, Interdisciplinary
Industrial Technology
330 Industrial Technology
Management
150 Management

## Marketing

130 Marketing
Mathematics
800 Mathematics
Military Science
080 Military Science
Modern Languages
700 Languages
710 Chinese
720 French
730 Japanese
740 German
770 Russian
780 Spanish
790 Portuguese
Music, School of
520 Music
530 Music Organizations and Ensembles
540 Music, Applied
560 Music Techniques
570 Music Education and Methods
580 Music Theory
590 Music History and Musicology
595 Performance Literature and Repertory
Philosophy and Religion
640 Religion
650 Philosophy
Physics
880 Physics
Political Science
940 (Political Methodology)
941 (Political Theory)
942 (American Politics)
943 (International Relations)
944 (Comparative Politics)
Psychology
400 Psychology
Public Policy
950 Public Policy
Science
820 Science and Science Education
830 Environmental Science
Social Science
900 Social Science
450 Social Work
Sociology, Anthropology, and Criminology
980 Sociology
990 Anthropology
Special Education
220 Special Education

Student field Experiences
280 Teaching
Theatre
490 Theatre

## Social Work


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## Course Descriptions

The following is a listing of all of the courses offered by the various departments of the university. The courses are listed in numerical order.

A course which has been re-numbered effective Fall 2002, Fall 2003, or Fall 2004 semester (2002-2004 or 2004-2006 "Programs and Courses") has the course's former number italicized and listed in parenthesis / /at the end of the new course number's description.

## 010 University, Interdisciplinary

010:092. Presidential Scholars Seminar - 1-3 hrs.
For Presidential Scholars only. Credit and topic listed in the Schedule of Classes. May be repeated in a different topic. (Variable)
010:196. Honors Seminar - 3 hrs.
Seminar covering selected topics. Some sections may be restricted to University Honors students. May be repeated for credit. Prerequisite: sophomore standing or consent of instructor. (Formerly 900:196) (Variable) 010:197. Honors Thesis/Project - 3 hrs.
Development and implementation of approved thesis project. Some sections may be restricted to University Honors students. Prerequisite: senior standing or consent of instructor. (Formerly 900:197) (Variable)
XXX:19P. Presidential Scholars Research - 1-3 hrs.
For Presidential Scholars only. Credit and topic to be approved by the Presidential Scholars Board. May be repeated once for a maximum of 6 hours. (Variable)

## 080 Military Science

## Basic Course

080:091. The American Defense Establishment: An Introduction - 1 hr . The role of the military in American society and foreign policy; basic history of the military establishment; introduction to the military rank structure; and leadership models. Discussion, 1 hr./wk. (Offered Fall) 080:092. Foundations of Military Organizations - 1 hr .
The basic organization of the military service; emphasis on the total U.S. Army, its mission and capabilities; description of the different Army branches; officer and non-commissioned officer duties and responsibilities. Discussion, 1 hr./wk. (Offered Spring)

## 080:094. Military Leadership and Problem-Solving Skills - 2 hrs.

Students discuss and learn the principles of leadership and apply them during a Leadership Weekend; introduction to the communication and decision-making processes, military writing, and ethics in the military discussion of the Principles of War, Military History, and the threat of regional conflicts. Discussion, 1 hr./wk., plus 1 field trip. (Offered Spring)

## 080:095: Military Survival Skills - 2 hrs.

Basic military survival principles are discussed in class and demonstrated during a Survival Weekend. Concepts taught are: shelter building, water and food gathering, land navigation, first aid, and rescue signaling. Discussion, $1 \mathrm{hr} . / \mathrm{wk}$.; lab, 1 hr ./wk., plus 1 field trip. (Offered Fall and Spring)

## 080:098. Military Science Leadership Practicum - 4-6 hrs.

A five-week summer program at Fort Knox, Kentucky, designed to provide leadership experiences to sophomores. Successful completion will qualify students to enroll in the ROTC Advanced Course. Prerequisite: departmental approval. (Offered Summer)

## Advanced Course

080:116. Small Group Leadership - 3 hrs.
Organizational leadership with emphasis on unit goals and standards, performance motivation, delegation of authority, and training; includes preparation for and conduct of student-led classes in designated subject areas. Discussion, $3 \mathrm{hrs} . / \mathrm{wk}$; lab, $1 \mathrm{hr} . / \mathrm{wk}$. Prerequisite: departmental
approval. (Offered Fall)
080:117. Principles of Military Operations - 3 hrs.
Fundamentals of military planning and preparation of operation orders for small units; examines organization, functioning, and communications of an infantry company in a tactical environment includir) defensive, offensive, retrograde, air assault, and fire support operation Discussion, 3 hrs./wk.; lab, 1 hr./wk. Prerequisite: departmental approval (Offered Spring)

## 080:118. Military Command and Management - 3 hrs.

Leadership and management of large organizations with emphasis on effective staff management of resources and organizational behaviol problems; includes personnel management, training management, and logistics management; oral presentation and research paper required Discussion, 3 hrs./wk; lab, $1 \mathrm{hr} . / \mathrm{wk}$. Prerequisite: departmental approval. (Offered Fall)
080:119. Military Leadership Development - $\mathbf{3}$ hrs.
A comprehensive review of professional leadership development priny ciples with a heavy emphasis on ethics of the military profession; case studies of applied leadership techniques and lectures addressing problert analysis, the decision-making process, communications, counseling motivation and team building; broad review of military law, the military justice system, and the Law of Land Warfare; oral presentation and research paper required. Discussion, $3 \mathrm{hrs} . / \mathrm{wk}$.; lab, $1 \mathrm{hr} . / \mathrm{wk}$. Prerequisitet departmental approval. (Offered Spring)

## 080:189. Readings in Contemporary Military Issues - 1-6 hrs.

Individualized list of selected readings in an area of emphasis. Prerequi site: departmental approval. (Offered Fall, Spring, and Summer)
080:192. Leadership Practicum - 4-6 hrs.
A five-week summer program at Fort Lewis, Washington, designed to provide leadership development and opportunities for students participating in the Advanced Course. Prerequisite: departmental approval, (Offered Summer)

## 120 Accounting

No Accounting courses may be taken on a credit/no credit basis by an Accounting Major, except 120:169, 120:170, 120:179, and 120:269.

## 120:030. Principles of Financial Accounting - 3 hrs .

Introduction to reporting financial information regarding the operating investing and financing activities of business enterprises to present and potential investors and creditors and others. Regression note: Subsequenf to successfully completing a 100-level Accounting course, neither 120:030nor 120:031 may bée repeated. Prerequisite: registration requires a cumulative UNI GPA of 2.20 or better, or the equivalent; sophomore standing (Offered Fall, Spring, and Summer)
120:031. Principles of Managerial Accounting - 3 hrs.
Introduction to processes leading to information useful to decision-maksl ers responsible for an accounting entity's activities. Includes product costing, cost behavior, budgeting, performance analysis, and relevani costs. Regression note: Subsequent to successfully completing a 100 -level| Accounting course, neither 120:030 nor 120:031 may be repeated. Prerequisites: C- or better in 120:030; sophomore standing. (Offered Fall, Spring, and Summer)
120:129. Intermediate Accounting I - 3 hrs.
Review of the accounting cycle and present/future value concepts and the study of the theory and practice of financial accounting for assets and related items. Prerequisites: 120:030; 120:031; junior standing. (Offered Fall, Spring, and Summer)
120:130. Intermediate Accounting II - 3 hrs.
Study of the theory and practice of accounting for liabilities and owner's equity, revenue recognition, accounting changes and error corrections, and statements of cash flow. Prerequisites: 120:030; 120:031; 120:129; a

C- or better in 120:129; junior standing. (Offered Fall, Spring, and Summer)
120:131. Cost Accounting - 3 hrs.
Management use of accounting data to aid in product costing, performance measurement, budgeting, and other operating decisions. Prerequisites: 120:030; 120:031; junior standing. (Offered Fall and Spring)
120:132. Income Tax - 3 hrs.
Federal taxes as applied to individuals and businesses; emphasis on individual returns, income and expense recognition, and property transactions. Prerequisite: junior standing. (Offered Fall)

## 120:134. Auditing - 3 hrs .

Principles, practices, and procedures used to determine reliability of financial records and statements. Prerequisites: 120:030; 120:031; 120:129; 120:130; junior standing. (Offered Fall and Spring)

## 120:135(g). Advanced Accounting - 3 hrs.

Accounting for business combinations, foreign currency translation, consolidations, and derivatives and hedging. Prerequisites: 120:030; 120:031; 120:129; 120:130; junior standing. (Offered Spring)
120:136. Computerized Accounting Systems - 3 hrs.
Introduction to business information and communication systems with an emphasis on how computers are incorporated into business systems; includes computer cases and electronic spreadsheets. Prerequisites: 120:030; 120:031; 120:129; 150:080; junior standing. (Offered Fall and Spring)
120:139(g). Government and Not-for-Profit Accounting - 3 hrs.
Introduction to governmental and not-for-profit accounting, financial reporting, and managerial control concepts, processes, and procedures. Prerequisites: 120:030; 120:031; 120:129; 120:130; junior standing. (Offered Fall and Spring)
120:141(g). Advanced Cost Accounting - 3 hrs.
Continuation of $120: 131$. Emphasis on cost techniques necessary for management decision making. Prerequisites: 120:030; 120:031; a C- or better in 120:131; junior standing. (Offered Spring)
120:142. Advanced income Tax - 3 hrs.
Advanced phases of income taxation as related to partnerships and corporations and estate and gift taxes; problems which require investigation of concepts and theories of taxable income. Prerequisites: 120:132; junior standing. (Offered Spring)
120:144. VITA: Individual Income Tax Preparation - 1 hr.
VITA, an acronym for Volunteer Income Tax Assistance, is a nationwide program sponsored by the Internal Revenue Service. VITA volunteers prepare federal and state income tax returns, at no charge, for primarily low-income individuals. Designed to give students an experiential learning opportunity. May be repeated for maximum of 3 hours. Prerequisite: $120: 132$. (Offered Spring)
120:148. C.P.A. Review - 3 hrs.
Designed to aid candidates in developing approaches to solutions of problems and answers to questions in the CPA examinations. Prerequisites: $120: 030 ; 120: 031 ; 120: 129 ; 120: 130 ; 120: 134$; junior standing. (Offered Spring)
120:150. Auditing Review - 1 hr .
Intensive review of auditing concepts to prepare accounting students for the Auditing section of the CPA examination. Prerequisites: 120:030; 120:031; 120:129; 120:130; 120:134; junior standing. (Offered Spring) 120:169. Internship - Accounting - 2-8 hrs.
Full-time accounting internship for minimum of eight weeks. Offered on credit/no credit basis only. Prerequisites: 2.70 cumulative UNI GPA; junior standing; consent of department head. (Offered Fall, Spring, and Summer)
120:170(g). Special Problems - Accounting - 1-3 hrs.
Directed readings, reports, and/or projects. Offered on credit/no credit basis only. Prerequisites: junior standing; consent of department head. (Offered Fall, Spring, and Summer)

## 120:179. Cooperative Education in Accounting - 1-3 hrs.

Offered on credit/no credit basis only. May be repeated for a maximum of 6 hours. (Offered Fall, Spring, and Summer)

## 120:185. Individual Readings B 1-3 hrs.

Directed readings and reports. May be repeated for maximum of 6 hours. Prerequisite: consent of department head or MAcc coordinator. (Offered Fall, Spring, and Summer)

## 120:214. Applied Professional Research - 3 hrs.

Emphasizes substantive accounting and auditing questions that arise in practice. Professional research methods will be used to solve cases. Teamwork, communication and analytical skills required of contemporary practitioners will be developed. Prerequisites: 120:134; admission to MAcc program. (Offered Spring)

## 120:229. Financial Accounting Theory - 3 hrs.

Examination of the conceptual underpinnings of accounting and the development of those concepts and the discussion of accounting issues as related to contemporary financial reporting. Prerequisite: admission to MAce program. (Offered Fall)

## 120:235. Advanced Accounting Systems - 3 hrs.

Builds upon the background provided by the Computerized Accounting Systems course and the Introduction to MIS course. Develops an integrating framework to illustrate the evolving role of current and emerging information technologies in supporting accounting and business activities. Prerequisites: 120:136; 150:080; admission to MAcc program. (Variable)

## 120:240. Advanced Auditing - 3 hrs.

Examination of selected professional issues that will be confronted in practice. Specific topical coverage will vary as contemporary issues emerge. Prerequisites: 120:134; admission to MAcc program. (Offered Fall)

## 120:242. Advanced Tax Topics - 3 hrs.

Covers advanced issues related to income taxation of corporations, partnerships, S corporations and fiduciaries, and estate and gift taxes. Emphasis on conceptual understanding and problem solving. Prerequisites: 120:132; admission to MAcc program. (Offered Spring)

## 120:243. Tax Research and Planning - 3 hrs.

Study and application of research methodologies related to tax compliance and tax planning work commonly performed by accountants. Prerequisites: 120:132; admission to MAcc program. (Offered Fall)

## 120:262. Managerial Accounting - 3 hrs.

Use of accounting data in managerial decision-making process and in the analysis and control of business operation. Prerequisites: 120:030 and 120:031, or equivalent; consent of MBA Director or MAcc Coordinator. (Offered Fall)

## 120:263. Cost Management - 3 hrs.

Study of the development and implementation of cost management systems that support operations in "World Class" manufacturing, service, and other organizations. Includes activity-based costing, costs of quality, strategic control systems, and management control systems. Prerequisites: 120:131; admission to MAcc program. (Offered Spring)
120:269. Graduate Internship in Accounting - 3 hrs.
Offers students enrolled in the Master of Accounting Program an opportunity to apply classroom learning in a professional accounting environment. Offered on credit/no credit basis only. Prerequisites: admission to MAce program; consent of MAcc Coordinator. (Offered Fall, Spring, and Summer)

## 120:280. Topics in Accounting - 1-3 hrs.

Selected topics in Accounting. May be repeated for maximum of 6 hours. Anticipated typical credit of 1 hour. Prerequisite: consent of MBA Director or admission to MAcc program. (Variable)
120:285. Individual Readings - $1-4 \mathrm{hrs}$.
Directed readings and reports. May be repeated for a maximum of 4
hours. Prerequisites: consent of MBA Director and department head, or consent of MAcc Coordinator. (Offered Fall, Spring, and Summer)

## 120:289. Seminar in Contemporary Issues in Accounting - 3 hrs.

Seminar on topics offered on a rotating basis. Offerings include contemporary issues in auditing, tax planning, international tax and accounting, and accounting theory. May be repeated one time for additional credit. Prerequisite: consent of MBA Director or admission to MAcc program. (Variable)
120:299. Research - 1-6 hrs.
Prerequisites: consent of MBA Director and department head, or consent of MAcc Coordinator. (Offered Fall, Spring, and Summer)

## 130 Marketing

## 130:101. Principles of Marketing - 3 hrs.

Survey course dealing with the role of marketing in society, customer determination and selection, product management, channels of distribution, pricing concepts, and promotional activity within an economic and business environment. Prerequisite: 920:024 or 920:053. (Offered Fall, Spring, and Summer)

## 130:106(g). Consumer Behavior - 3 hrs.

Recent findings of psychologists, sociologists, anthropologists, and marketers in relationship to internal and external influences on buyer behavior and marketing-related decision making. Prerequisites: 130:101; 920:024 or 920:053; junior standing. (Offered Fall, Spring, and Summer)
130:108(g). Marketing Research - 3 hrs.
Procedures used in defining a marketing problem and carrying out the research necessary for its proper solution. Prerequisites: 130:101; 150:080; 800:072 or 800:092; 920:020; 920:024 or 920:053; 920:070; junior standing. (Offered Fall and Spring)

## 130:131. New Product Management - 3 hrs.

Study of the "Product" marketing mix element, with focus on new product development, from idea generation through commercialization. Prerequisites: 130:101; 920:024 or 920:053; junior standing. (Offered Fall) 130:142. Pricing - 3 hrs.
Study of price, as one of the major components of marketing, from economic, psychological, and sociological perspectives. Prerequisites: 130:101; 920:024 or 920:053; junior standing. (Variable)
130:150. Advertising and Promotion - 3 hrs.
Decision making in advertising, consumer promotion, sales promotion, and public relations. Includes market analysis, establishing promotion objectives, budgeting, media/promotion mix selection, communication techniques, and evaluation of effectiveness. Prerequisites: 130:101; 920:024 or 920:053; junior standing. (Offered Fall and Spring)
130:153. Sales Management - 3 hrs.
Study of sales management functions from a decision-making perspective by developing field management tools and procedures related to organizing, staffing and training a sales force, directing sales force operations, sales planning, and the evaluation of sales performance. Prerequisites: 130:101; 920:024 or 920:053; junior standing. (Offered Fall and Spring) 130:160. Internet Marketing - 3 hrs.
Introduces students to the field of electronic commerce from marketing perspective. Involves study of various dimensions of marketing on the Internet, its capabilities and limitations, and the basics of communication technology that drive the Internet. Prerequisites: 130:101; 920:024 or 920:053; junior standing; marketing major or consent of instructor. (Variable)

## 130:161. Distribution - 3 hrs.

Study of the behavioral dimensions of marketing channel relations, the roles of channel members, their use of power, the management of conflicts that arise, the communications network and the logistics of the organized movement of products. Prerequisites: 130:101; 920:024 or 920:053; junior standing. (Variable)

## 130:166. Retail Management - 3 hrs.

Study of tools and decisions in managing or owning a retail busine strategic planning, audit, trade-area analysis, location planning, franchiz ing, pricing, computerization, operations and merchandise managemert Prerequisites: 130:101; $920: 024$ or $920: 053$; junior standing. (Offered Spring)

## 130:169. Internship-Marketing - 2-8 hrs.

Full-time internship in a marketing-related business for a minimum of eight weeks. Maximum of 3 hours may be applied to Marketing majo electives category. Prerequisites: $130: 101 ; 130: 106 ; 130: 108 ; 150: 08 \mathrm{C} \mid$ 800:072 or 800:092; 920:020; 920:024 or 920:053; 920:070; UN1 cumulat tive GPA of 2.50 or better; senior standing; consent of department head. (Offered Fall, Spring, and Summer)

## 130:170. Entrepreneurship - 3 hrs.

Exploration of entrepreneurial qualities, opportunity assessment, strategic planning of new ventures and legal and contemporary environmentul issues. Not for students with majors in Accounting, Business Teaching| Economics-Emphasis 3, Finance, Management, Management Informay tion Systems, Marketing or Real Estate. No credit if credit previously earned in 130:172. Prerequisites: 920:024 or both 920:053 and 920:0544 junior standing. (Variable)
130:172. Venture Opportunity Analysis - 3 hrs .
Examination of skills and procedures needed to plan and create a new venture. Emphasis on self-assessment, first venture analysis, and creatio of comprehensive business plan. Only for students majoring in Accountd ing, Business Teaching, Economics-Emphasis 3, Finance, Management Management Information Systems, Marketing or Real Estate. No credit if credit previously earned in 130:170. Prerequisites: 120:030; 120:031 130:101; 150:153; 920:053; 920:054; junior standing. (Variable)
130:173. Venture Strategy - 3 hrs.
Procedures for organizing, financing, and implementing a new venture and managing both the start up and growth phases. Only for students majoring in Accounting, Business Teaching, Economics-Emphasis 3, Finance, Management, Management Information Systems, Marketingt or Real Estate. Prerequisites: 120:030; 120:031; 130:101; 130:172; 150:153; 920:053; 920:054; junior standing. (Variable)

## 130:177(g). Global Marketing - 3 hrs.

Marketing practices and trends in businesses serving foreign markets Prerequisites: 130:101; 920:024 or 920:053; junior standing. (Offered Fall and Spring)
130:178. Services Marketing - 3 hrs.
Develops an understanding of service as a product or component of a product. Provides an opportunity to gain an appreciation for the unique challenges inherent in marketing and managing services, and service products. Topics include service design and delivery, service quality and standards, and roles played by both service provider and customer. Prerequisites: 130:101; 920:024 or 920:053; junior standing. (Variable)

## 130:179. Cooperative Education in Marketing - 1-6 hrs.

Offered on credit/no-credit basis only. Not accepted for credit toward the Marketing major, but can be used as a university elective. Prerequisites: 130:101; 920:024 or 920:053; UNI cumulative GPA of 2.50 or better; consent of department head. (Offered Fall, Spring, and Summer)

## 130:182. Applied Marketing Research - 3 hrs.

Experimental study with marketing research project management, development and execution utilizing MIS, computer programs, database management, and interaction with actual business problems. Prerequisites: 130:101; 130:108; 150:080; 800:072 or 800:092; 920:020; 920:024 or 920:053; 920:070; junior standing. (Variable)

## 130:187. Direct Marketing - 3 hrs.

Introduction to direct marketing with data base applications. Prerequisites: 130:101; 920:024 or 920:053; junior standing. (Variable)
130:191(g). Marketing Strategy - 3 hrs.
Integration of major marketing functions from a managerial perspec-
tive. Emphasis on developing marketing strategies and applying strategic marketing decisions. Prerequisites: $130: 101 ; 130: 106 ; 130: 108 ; 150: 080$; 800:072 or 800:092; 920:020; 920:024 or 920:053; 920:070; senior standing. (Offered Fall and Spring)
130:198. Independent Study - 1-6 hrs.
Not accepted for credit toward the Marketing major, but can be used as a university elective. Prerequisites: 130:101; 920:024 or 920:053; junior standing; consent of department head. (Offered Fall, Spring, and Summer)

## 130:263. Marketing Management - 3 hrs.

Integrated approach to marketing from managerial viewpoint using economic, quantitative, and behavioral concepts in analyzing and developing framework for decision making and implementing a marketing program. Prerequisite: consent of MBA. Director. (Offered in M.B.A. Module II begins mid-November and ends mid-February)

## 130:280. Topics in Marketing - $1-3$ hrs.

Selected topics in Marketing. May be repeated for maximum of 6 hours. Anticipated typical credit of 1 hour. Prerequisite: consent of MBA Director. (Variable)

## 130:285. Individual Readings - 1-3 hrs.

May be repeated for a maximum of 4 hours. Prerequisites: consent of department head and MBA Director. (Offered Fall, Spring, and Summer)

## 130:297. Practicum - $\mathbf{1 - 3} \mathbf{h r s}$.

Prerequisites: consent of department head and MBA Director. (Offered Fall, Spring, and Summer)
130:299. Research - 1-6 hrs.
Prerequisites: consent of department head and MBA Director. (Offered Fall, Spring, and Summer)

## 150 Management

## 150:032. Introduction to Business Programming - 3 hrs.

Introduction to business programming concepts and methodologies. Design and documentation of typical business applications using a business programming language. Prerequisite: 150:080. (Offered Fall and Spring) 150:034. Business Programming - 3 hrs.
Study of a major business-oriented programming language, including language commands, syntax, and structure. Various applications of the language are introduced as solutions to specific business problems through programming exercises and assignments. MIS majors may take this course in place of 810:034. No credit for students earning credit in 810:034. Prerequisites: 150:080; one of the following - 150:032, 810:030, 810:035, 810:036, or 810:061. (Offered Fall and Spring)
150:075. Microcomputer Applications for Business - 3 hrs.
Application and integration of microcomputer software (word processing/database/spread sheets/data communications/operating systems) and their relationship to business. Prerequisites: 150:080; keyboarding experience required. (Offered Fall)

## 150:090. Introduction to Information Systems - 3 hrs.

Introduction to management information systems. Includes introduction to hardware and data communication technology, software and data management, and business applications of the technology. (Offered Fall, Spring, and Summer)
150:100. Legal and Social Environment of Business - 3 hrs.
Introduction to law and the judicial process; business ethics; government regulation of business, including administrative, antitrust, discrimination, international, product liability, and internet law. Prerequisite: junior standing. (Offered Fall, Spring, and Summer)

## 150:101. Business Law I - 3 hrs.

Study of the common law of contracts and Article II of the Uniform Commercial Code. Prerequisite: junior standing. (Offered Fall and Spring)

150:102. Business Law II $\mathbf{- 2} \mathbf{~ h r s . ~}$
Commercial paper, secured transactions, bankruptcy, partnerships, and corporations. Prerequisite: junior standing. (Offered Fall and Spring) 150:104. Law for the C.P.A. Examination - 3 hrs.
Intensive study of business law to prepare accounting students for the law part of the CPA examination. Prerequisites: 120:030; 120:031; 120:129; 120:130; 120:134: 150:101; 150:102; junior standing. (Offered Spring)
150:105(g). Employment and Labor Law - 3 hrs.
Legal and practical examination of employee selection, dismissal, discrimination, health and safety, labor relations and associated human resource management issues. Prerequisites: 150:100 or 150:101 or equivalent; junior standing. (Offered Fall and Spring)
150:112. Systems Analysis and Design - 3 hrs.
Introduction to systems development life cycle with emphasis on structured tools and techniques for systems design and presentation of design specifications. Prerequisites: 150:032; junior standing. (Offered Fall and Spring)
150:113. Business Communication - 3 hrs.
Introduction to communication skills expected in a general business environment, including interpersonal, group, presentational, electronic, non-verbal and written communication, as well as techniques for adjusting to the communication culture of U.S. business organizations. Prerequisites: 620:005 or 620:015; junior standing. (Offered Fall and Spring) 150:114(g). Communication Management - 3 hrs.
Design and management of communication functions to support business strategies. Topics include work information flow, integrated communication functions, knowledge management, supply chain communication issues, organizational culture, and communication diversity. Prerequisites: 620:005 or 620:015; junior standing. (Variable)

## 150:116(g). Human Resource Development - 3 hrs.

Focus on strategic, administrative aspects of human resource development (HRD). Use of HRD processes and programs, including skills and technical programs, to provide an applied perspective. Prerequisite: junior standing. (Offered Fall)
150:117. Field Experience in Business Teaching - 1 hr .
Field experience for those seeking licensure to teach Business Education at the secondary and postsecondary level. Includes cooperative work in keyboarding at elementary level and second experience at middle school level. Offered on credit/no credit basis only. Prerequisites: 200:017; 200:030; 200:128; 200:148; 250:150 (Level II of Professional Education Sequence); junior standing. Corequisite: $150: 191$. (Offered Spring) 150:119(g). Leadership and Human Relations - 3 hrs.
Study of leadership theories and practices for purpose of developing human resources within organizations. Provides opportunity to develop human relations skills. Prerequisite: junior standing. (Offered Fall and Spring)

## 150:120. Database Management and Theory - 3 hrs.

Study of database theory and design and strategic and organizational implications of data management, a comparative analysis of database models, and the use of a fourth generation relational database. Prerequisites: 150:032; 150:080; 150:034 or 810:034; junior standing. Prerequisite or corequisite: $150: 112$. (Offered Fall)

## 150:125. Information Systems Development - 3 hrs.

Continuing study of the systems development life cycle with emphasis on the phases of detail specification, programming, testing, training, conversion and evaluation through an actual systems development project. Study of problems associated with managing the development of large business applications. Prerequisites: 150:032; 150:034 or 810:034; 150:080; 150:112; 150:120; junior standing. (Offered Spring)
150:127. Decision Support Systems - 3 hrs.
Study of decision support systems and applications. Topics include decision making, modeling, and support; DSS development tools with
particular emphasis on spreadsheet applications; and organizational and social implications of decision support systems. Prerequisites: 150:032; 150:034 or 810:034; 150:080; 150:112; 150:120; 150:153; junior standing. (Offered Fall)

## 150:128. Advanced Business Pragramming Methods - 3 hrs.

Study of advanced business programming methods, including markup languages, server-side and client-side scripting languages and/or object-oriented languages. Completion of several programming projects. No credit for MIS majors who have taken or will take both $810: 061$ and $810: 161$. Prerequisites: 150:032; 150:080; junior standing. (Offered Spring)

## 150:130 (g). Training: Design and Delivery - 3 hrs.

Focus on tactical design and delivery aspects of human resource development programs using skills and technical training programs to provide an applied perspective. Prerequisite: junior standing. (Offered Spring)
150:140. Management Information Systems Policy - 3 hrs.
Examination of key issues in effective management of an organization's information services activity. Emphasis on planning and coordinating information systems development with the organization's strategic plan; awareness of and enhancement of information technology as a competitive tool. Prerequisites: 150:032; 150:034 or $810: 034 ; 150: 080 ; 150: 112$; junior standing. Prerequisite or corequisite: $150: 120$. (Offered Spring)
150:145. Management Information Systems - 3 hrs.
Role of information systems in supporting organizational goals; design and development of business applications with particular emphasis on using development tools; and the impact of information systems on the organization. May not be taken for credit by MIS majors. Prerequisites: 150:080 or equivalent; junior standing. (Offered Fall and Spring)
150:147. Information Center Operations - 1 hr .
Exploration of information center services, information center management, and user support issues. Practical experience and development of skills in an information center environment providing hardware and software support services to other students and faculty. May be repeated for maximum of 3 hours. Prerequisites: 150:080; two of the following - 150:032; 150:034 or $810: 034 ; 810: 061 ; 810: 063$; junior standing; consent of instructor. (Variable)

## 150:153. Organizational Management - 3 hrs.

Study of contemporary organizational concepts and issues and their practical implications for managerial behavior. Prerequisite: 2.20 cumulative UNI GPA or higher, or the equivalent; junior standing. (Offered Fall, Spring, and Summer)

## 150:154. Operations Management - 3 hrs.

Principles of management of productive processes in both manufacturing and service industries. Topics include organizational structure, product selection, process design, capacity and location management, quality management, forecasting, inventory management, and job design. Prerequisites: 120:030; 120:031; 150:080; 800:072 or $800: 092$ or equivalent; 920:020; 920:070; junior standing. (Offered Fall, Spring, and Summer)

## 150:161. Supply Chain and Purchasing - 3 hrs.

Examination of the integrative management process of purchasing, producing, supplying, and distributing goods and services. Prerequisites: 120:030; 120:031; 150:080; 150:153; 150:154; 800:072 or 800:092; 920:020; 920:053; 920:054; 920:070; junior standing. (Offered Fall and Spring)
150:163. Managerial Problem Solving.- 3 hrs.
Effective thinking about organizational problems. Topics include critical thinking; problem identification, definition, and analysis; alternative generation and evaluation; negotiation; and design. Prerequisites: 150:153; junior standing. (Offered Fall and Spring; Summer variable)

## 150:164. Quality and Process Improvement - 3 hrs.

Management and improvement of product/service quality and organizational processes. Topics include quality management programs; total quality management; statistical process control; business process design; reengineering; benchmarking; and best practices research. Prerequisites:

120:030; 120:031; 150:080; 150:153; 150:154; 800:072 or $800: 092$ or equiv| alent; 920:020; 920:070; junior standing. (Offered Fall and Spring)

## 150:165(g). Organizational Behavior - 3 hrs.

Examination of micro and macro issues found within an organization including people, technology, environment, and structure. Prerequisite 150:153; 800:072 or $800: 092$ or equivalent; 920:070; junior standing (Offered Fall and Spring; Summer variable)

## 150:166(g). Staffing - 3 hrs.

Study and application of basic staffing practices and the processes of acquiring, orienting, evaluating, and terminating employees. Prerequisiter $150: 153$; junior standing. (Offered Fall and Spring)
150:167(g). Strategic Supply Management - 3 hrs.
Discussion of emerging issues in developing a supply chain and operą tions strategy for competitive success. Study of the roles of technology quality, and integrative logistics, in the context of globalization of markets and procurement. Prerequisites: 120:030; 120:031; 130:101; 150:080 150:153; 150:154; $800: 072$ or $800: 092$ or equivalent; $920: 020 ; 920: 053$ 920:054; 920:070; junior standing. Prerequisites or corequisites: 130:161 150:161; 150:164. (Offered Spring)

## 150:168(g). Compensation and Benefits - 3 hrs.

Examination of the total compensation system including wage deter4 mination, salary structures, group rewards, and benefits. Prerequisitef $150: 153$; junior standing. Prerequisite or corequisite: 150:166. (Offered Spring)

## 150:169(g). Management Internship - 1-3 hrs.

Uncompensated work experience in conjunction with an academic proj-s ect conducted under faculty guidance. May be repeated for maximum of 6 hours. Offered on credit/no credit basis only. Prerequisites: 2.70 cumulative UNI GPA; junior standing; consent of department head. (Offered Fall, Spring, and Summer)

## 150:170. Special Problems - 1-3 hrs.

Credit determined at registration. Student will choose one of the following areas:
I. Management
2. Law
3. Business Teaching
4. International Business
5. Management Information Systems

May be repeated for maximum of 6 hours. Prerequisite: junior standingt| consent of instructor. (Offered Fall, Spring, and Summer)

## 150:174(g). Ethics in Business - 3 hrs.

Application of ethical principles and analytic methods to contemporary, issues in business. Topics include moral responsibility of corporations and their regulation; economic policy, business practices, and social justicel rights and obligations of employers and employees; meaningful worku motivation, and the worker; affirmative action and reverse discriminad tion; environment and natural limits of capitalism. Prerequisite: junio4 standing. (Same as $640: 174 \mathrm{~g}$ and $650: 174 \mathrm{~g}$ ) (Offered Fall and Spring)
150:175. Business Policy and Strategy - 3 hrs.
Study of strategy formulation and implementation processes. Focus on the application of integrative approaches to management through case analysis. For senior business majors. Prerequisites: completion of all other courses in the "business core"; 120:030; 120:031; 130:101; 150:080; 150:100; 150:153; 150:154; 160:151; 800:072 or 800:092; 920:020; 920:053; 920:054; 920:070; senior standing. (Offered Fall, Spring, and Summer)

## 150:179. Cooperative Education - 1-3 hrs.

Compensated work experience in conjunction with an academic project conducted under faculty guidance. For majors only. May be repeated for maximum of 6 hours. Offered on credit/no credit basis only. Prerequi* sites: 2.70 cumulative UN1 GPA; junior standing; consent of department head. (Offered Fall, Spring, and Summer)

## 150:187. Organizational Design and Development - 3 hrs.

Application of concepts presented in 150:153 and 150:165. Seminar and field-based experience in designing solutions to organizational design and development problems. Prerequisites: 150:153; 150:163; 150:165; 800:072 or 800:092 or equivalent; 920:070; junior standing. (Variable) 150:189. Seminar in International Business - 3 hrs.
Problems of organizing, financing, and operating multinational enterprises, and impact of multinational business upon a world economy. Prerequisites: 130:101; 150:153; 920:024 or 920:053; junior standing. (Offered Fall and Spring)
150:190. Topics in Management Information Systems - 1-3 hrs.
Current topics of interest from the field of management information systems. Offerings may include telecommunications, distributed information systems, expert systems, ergonomics, end-user computing. Prerequisites: 150:112; MIS major; junior standing. (Variable)
150:191. Curriculum and Methods for Business Education - 3 hrs .
Curriculum development, motivation, specific presentation methods, and evaluation as applied to business programs. Prerequisites: 200:017; 200:030; 200:128; 200:148; 250:150 (Level II of the Professional Education Sequence); junior standing. Corequisite: 150:117. (Offered Spring)
150:249. Management Information Systems Concepts - 3 hrs.
Provides students with knowledge of the role of information systems within an organization; systems, information and decision theory; information systems applications including decision support; and systems evaluation and selection. Prerequisite: consent of MBA Director. (Offered in MBA Module II - begins mid-November and ends mid-February) 150:250. Strategic Planning and Organization Analysis - 3 hrs.
Analysis of business organization, its environment, and the strategic planning function. Should be taken in first semester of study. Prerequisite: consent of MBA Director. (Offered in MBA Module I - begins late August and ends mid-November)

## 150:262. Leadership and Organizational Behavior - 3 hrs.

Study of contemporary leadership and its impact upon micro and macro organizational issues. Prerequisites: 150:153 or equivalent; consent of MBA Director. (Offered in MBA Module I - begins late August and ends mid-November)
150:272. Cross-Functional Operations - 3 hrs .
Analysis and design of business operational decisions in complex production and service environments. Prerequisite: consent of MBA Director. (Offered in MBA Module III - begins mid-February and ends early May) 150:274. Statistical and Quantitative Analysis - 3 hrs.
Theory and application of management science techniques, statistical methods, data analysis, and research methodology for management decision making. Prerequisite: consent of MBA Director. (Offered in MBA Module I - begins late August and ends mid-November)
150:276. Business Capstone Experience - 1 hr .
Analyze, solve, and present a solution to a complex, interdisciplinary business problem. Prerequisite: consent of MBA Director. (Offered in MBA Module III - begins mid-February and ends early May)
150:280. Topics in Management - 1-3 hrs.
Selected topics in Management. May be repeated for maximum of 6 hours. Anticipated typical credit of 1 hour. Prerequisite: consent of MBA Director, (Offered in MBA Modules I, II, and III)
150:285. Individual Readings - 1-3 hrs.
Directed readings and reports. May be repeated for maximum of 4 hours.
Prerequisite: consent of MBA Director. (Offered in MBA Modules I, II, and III)
150:297. Practicum - 2 hrs.
Prerequisite: consent of MBA Director. (Offered in MBA Modules I; II, and III)
150:299. Research - $1-6$ hrs.
Prerequisite: consent of MBA Director. (Offered in MBA Modules I, II, and III)

## 160 Finance

160:055. Personal Financial Planning and Asset Management - 3 hrs. Overview of fundamentals of financial planning and asset allocations with emphasis on diversification of risk. (Offered Fall and Spring)

## 160:140. Principles of Real Estate - 3 hrs .

Introduction to nature of real estate, its investment value, and related decision analysis. Includes appraisal, investment analysis, location theory, financing, legal characteristics, and development. Not intended as prelicense course for sales personnel. Prerequisite: junior standing. (Offered Fall and Spring)
160:141. Real Estate Finance - 3 hrs.
Introduction to concepts, techniques, and instruments integral to the financing of real estate. Includes discussion of financial markets and institutions from which financing can be obtained. Prerequisites: 120:030; 120:031; C- or better in 160:151; 800:072 or 800:092; 920:053; 920:054; 920:070; junior standing. (Offered Fall and Spring)

## 160:142. Real Estate Appraisal and Investment - 3 hrs.

Introduction to techniques of appraising the value of real estate. Includes discussion of market approach, cost approach, income approach, and techniques of analyzing investment value of real estate. Prerequisites: 160:140; junior standing. (Offered Fall and Spring)
160:143. Real Estate Law and Brokerage - 3 hrs.
Study of the law affecting real estate value, financing, conveyance, contractual obligations, and brokerage, including agency relationships. Prerequisites: $160: 140$; junior standing. (Offered Spring)
160:150(g). Commercial Bank Management - 3 hrs.
Study of major decisions and policies involved in management of commercial banks in the context of asset/liability management. Prerequisites: 120:030; 120:031; C- or better in 160:151; 800:072 or 800:092; 920:053; 920:054; 920:070; junior standing. (Offered Fall and Spring)
160:151(g). Corporation Finance - 3 hrs.
Introductory course in corporation finance relating to the role of the finance function with the corporate enterprise. Graduate students completing this course will be required to complete a graded, written case covering financial management and capital budgeting. Prerequisites: 120:030; 120:031; 800:072 or 800:092; 920:053; 920:054; 920:070; junior standing. Mathematics majors who have successfully completed 800:060 and 800:061 may enroll with the consent of department head. (Offered Fall, Spring, and Summer)

## 160:152(g). Principles of Investments - 3 hrs.

Investment decision making, analysis, and management. Includes descriptive analysis of various investment media, techniques of value analysis, and basic topics in portfolio management. Prerequisites: 120:030; 120:031; C- or better in 160:151; 800:072 or 800:092; 920:053; 920:054; 920:070; junior standing. (Offered Fall, Spring, and Summer)
160:154. Financial Information Systems and Analysis - 3 hrs.
Study of financial information systems (FIS) from perspective of financial decision makers. Topics include information economics, information value and business performance, and financial analysis. Prerequisites: 120:030; 120:031; C- or better in 160:151; 800:072 or 800:092; 920:053; 920:054; 920:070; junior standing. (Variable)

## 160:155. Advanced Financial Management - 3 hrs.

In-depth examination of the tools, concepts, and theories of financial management. Topics include working capital management, capital budgeting, financial theory, and various appropriate analytical tools. Prerequisites: 120:030; 120:031; C- or better in 160:I51; 160:161; 800:072 or 800:092; 920:053; 920:054; 920:070; junior standing. (Offered Fall and Spring)
160:156. Topics in Financial Management - 3 hrs.
Examination of various aspects of financial management through discussions of specific topics. May be repeated only in different section.

Prerequisites: 120:030; 120:031; 800:072 or 800:092; 920:053; 920:054; 920:070; junior standing; plus the following prerequisites for the particular section.

Sec. 1: Advanced Cases. Prerequisites: C- or better in 160:151; 160:155.
Sec. 2: Security Analysis. Prerequisites: C- or better in 160:151; 160:152.
Sec. 3: Options/Futures. Prerequisites: C- or better in 160:151; 160:152.
Sec. 4: Working Capital. Prerequisites: C- or better in 160:151; 160:155.
(Section 2 offered Spring; section 3 offered Fall; Section 1 and 4 variable)
160:158(g). International Financial Management - 3 hrs.
Study of financial decision making in an international context. Topics include financing international trade, management of foreign exchange risk, investment analysis, working capital management, and international taxation. Case study approach. Prerequisites: 120:030; 120:031; C- or better in 160:151; 800:072 or 800:092; 920:053; 920:054; 920:070; junior standing. (Offered Fall and Spring)

## 160:161. Intermediate Financial Management - 3 hrs.

Examination of the tools, concepts, and theories of financial management. Topics include working capital management, capital budgeting, financial theory, and financial modeling. Prerequisites: 120:030; 120:031; C- or better in 160:151; 800:072 or 800:092; 920:053; 920:054; 920:070; junior standing. (Offered Fall and Spring)

## 160:162. Risk Management and Insurance - 3 hrs.

Fundamentals of risk and insurance as they apply to financial management. Prerequisite: junior standing. (Variable)
160:163. Insurance Company Operations - 3 hrs.
In-depth study of management issues unique to insurance operations and companies from a functional perspective. Prerequisites: 120:030; 120:031; C- or better in 160:151; 800:072 or 800:092; 920:053; 920:054; 920:070; junior standing. (Variable)
160:170. Special Problems - 1-3 hrs.
Credit determined at registration. Prerequisites: junior standing; consent of department head. (Variable)
160:179. Cooperative Education in Finance - 1-3 hrs.
Compensated work experience in conjunction with an academic project conducted under faculty guidance. Offered on credit/no credit basis only. Prerequisites: 3.00 cumulative UNI GPA; consent of department head. (Offered Fall, Spring, and Summer)
160:263. Financial Management - 3 hrs.
Concepts of financial management for the student having a basic background in corporate finance; emphasizes a theoretical approach to complex problems (capital acquisition, analysis of capital projects, and financial analysis). Prerequisites: B or better in 160:151; consent of MBA Director. (Variable)

## 160:264. Advanced Financial Management - 3 hrs.

Financial decision making for students with basic background in business and introductory finance; expands practical ability to deal with complex financial decisions. Prerequisite: consent of MBA Director. (Variable)
160:266. Financial Management and Markets - 3 hrs.
In-depth examination of tools, concepts, theories, and analysis of managerial finance integrated with case applications. Students expected to apply concepts from managerial finance in analyzing, presenting, and discussing cases at an advanced level. Prerequisites: 160:151 or equivalent; consent of MBA Director. (Offered Spring)
160:280. Topics in Finance - 1-3 hrs.
In-depth examination of various aspects of financial management through discussions of specific topics in finance. Integration of financial theory and case analysis with advanced finance topics. May be repeated
for maximum of 6 hours. Anticipated typical credit of 1 hour. Prerequ site: consent of MBA Director. (Variable)
160:285. Individual Readings - 1-3 hrs.
Directed readings and reports. Prerequisite: consent of MBA Directoul (Variable)
160:297. Practicum - 2 hrs.
Prerequisite: consent of MBA Director. (Variable)
160:299. Research - 1-6 hrs.
Prerequisite: consent of MBA Director. (Variable)

## 170 Postsecondary Education: Student Affairs

## 170:050. Career Decision Making - 2 hrs.

Introduction to a structured career decision-making process, including self-awareness, career and educational information, computerized and internet assistance and resources, and related activities/projects. (Offered Fall and Spring)
170:055. Strategies for Academic Success - 2 hrs.
Provides development and use of effective learning and study strategies! skills necessary for independent learning and academic success. Univer-1 sity policies, procedures, and services will be addressed. (Offered Fall and Spring)
170:218. Organization and Governance of Postsecondary Education -
3 hrs.
Introduction to the organization and administration of institutions that conduct postsecondary education including two- and four-year colleget and universities. Emphasis on organizational theory and behavior and use of case studies to illuminate the multifaceted mission and operation of these organizations. (Offered Fall)

## 170:222. Communication and Leadership in Postsecondary Education

 -3 hrs .Broad overview of communication, counseling and advising theory and their application to leadership in the postsecondary setting. Emphasis on developing individual communication skills for the various professional roles found in postsecondary education. Prerequisite: graduate standing. (Offered Fall)

## 170:230. Postsecondary Curriculum and Assessment - 3 hrs.

Study of relationships between key elements of academic planning and student learning at course, program, and institutional levels. Investigation of issues affecting, perspectives on, and models for curricular and assessment decision making. (Offered Spring)

## 170:231. Assessment in Postsecondary Education - 3 hrs.

Examination of topics related to assessment in postsecondary education including benchmarking, program evaluation, student learning and developmental outcomes, student needs, student satisfaction, and campus culture. Prerequisite: 250:205. (Offered Spring)

## 170:250. Teaching in College - 3 hrs.

Examination of issues and problems in college teaching including roles of the college teacher, factors affecting teaching and learning environment, learning theory, course planning, and teaching strategies. (Offered Fall and Spring)

## 170:252. Current Issues in Higher Education - 3 hrs.

Organized around the major issues confronting community colleges, senior colleges, and universities in contemporary society. (Variable)
170:256. The Two-Year College - 3 hrs. .
Provides an understanding of the mission, governance, operation, and student and faculty issues unique to the two-year college in the United States, with particular attention to lowa. (Offered Spring and Summer) 170:260. History and Philosophy of Higher Education - 3 hrs. Overview of the historical development, issues, philosophies, and cultural backgrounds of higher education in America. (Offered Fall)

170:264. Introduction to Student Affairs - 3 hrs.
Introduction to the field of college/university student services with applications of theory to practice. (Offered Fall)
170:266. Administration of Student Affairs - 3 hrs.
Provides the knowledge and develops the skills essential to effective administration of student affairs staff and services, i.e., professional development, strategic planning, budgeting and finance, human resource management, policy and legal issues, and technology and change. Prerequisites: 170:218; 170:264. (Offered Fall)
170:270. College Studemt Development - 3 hrs.
Addresses student development theories (moral, ethical, intellectual, and psychosocial), and their application in student affairs settings. (Offered Spring)
170:285. Readings in Postsecondary Education.
(Variable)
170:209. Seminar in Postsecondary Education.
(Variable)
170:250. Practicum in Postsecondary Education - 3 hrs.
Orientation and experience for Student Affairs majors in a professional setting. Offered on credit/no credit basis only. May be repeated for maximum of 6 hours. (Variable)
170:291. Internship in Postsecondary Education - 3-6 hrs.
Supervised substantive experience in a postsecondary setting. (Variable)
170:299. Research.
(Variable)
170:310. Organizational Processes and Communication - 3 hrs.
Organizational development in the school setting. Examination of organizational and communication models and processes with emphasis on interaction patterns, interpersonal relations and interpersonal influence. Prerequisite: doctoral status or consent of department. (Same as 270:308) (Formerly 190:310) (Variable)
170:311. Educational Leadership and Systems Change - 3 hrs.
Examination of knowledge base for both change and leadership. Emphasis on understanding how change factors and leadership styles interact to influence receptiveness to and acceptance of change. Prerequisite: doctoral status or consent of college. (Same as 270:311) (Formerly 190:311) (Variable)
170:399. Seminar in Postsecondary Education - 1-3 hrs.
Special topics as indicated in the schedule of classes. Prerequisite: consent of instructor. (Variable)
170:391. Internship in Postsecondary Education - 1-3 hrs.
Supervised advanced experience in a postsecondary setting. Prerequisite: consent of instructor. (Variable)
170:397. Practicum: Postsecondary Education - 1-3 hrs.
Advanced orientation and experience for Student Affairs majors in a professional setting. Offered on credit/no credit basis only. May be repeated for maximum of 6 hours. Prerequisite: consent of instructor. (Variable)

## 190 Education, Interdepartmental

190:301. Context of Contemporary Education - 3 hrs.

Examination of issues and problems of concern to educational practitioners from the perspective of educational philosophy, history, and sociology. Prerequisite: doctoral status or consent of college. (Variable)
190:303. Inquiry - 3 hrs.
Introduction to the major philosophical schools of thought that underpin the practice of social and educational inquiry. Includes empiricism, critical theory, hermeneutics, and constructivism perspectives. Prerequisite: doctoral status or consent of college. (Variable)
190:305. Qualitative Methods in Educational Research - 3 hrs.
Study of the techniques of direct observation and analysis of human behavior in ongoing, naturalistic settings. Focus on problems associated
with the two main approaches used in qualitative research - participant observation and in-depth interviewing. Prerequisite: 190:303. (Formerly 250:302) (Variable)

## 190:307. Quantitative Methods in Educational Research - 3 hrs.

Quantitative research approaches applicable to problem-solving in educational practice. Major methods including experiment, quasi-experiment, and survey; major forms of instrumentation; frequently used quantitative analyses, both descriptive and inferential; report and proposal writing. Prerequisites: 190:303; 250:205; an upper-division course in statistical methods; doctoral status or consent of college. (Variable)
190:389. Doctoral Seminar
Credit/no credit only. (Offered Fall and Spring)
190:399. Dissertation Research
Credit/no credit only, Initial enrollment requires attendance at doctoral research seminar. (Offered Fall and Spring)

## 200 Educational Psychology

200:017. Field Experience: Exploring Teaching - 1 hr .
Direct and indirect experiences in the ways schools function, roles and responsibilities of teachers, and student behavior. Offered on credit/no credit basis only. Corequisite: 200:030. (Offered Fall and Spring)
200:030. Dynamics of Human Development - 3 hrs.
Introduction to behavioral characteristics of individual develqpment; basic developmental principles, age-stage characteristics; and provisions community, family, and school make in the development of children and youth. Prerequisite: sophomore standing. Corequisite: 200:017. (Offered Fall and Spring)
200:100(g). Child Psychology - 2 hrs.
Application of developmental concepts, principles, and theories to contemporary problems of children ages 6-12 with emphasis on possible causes, children's emotional reactions, and ways of coping with these situations in the classroom. Prerequisites: 200:030 or equivalent; junior standing. (Variable)
200:109(g). Development and Assessment of Young Children - 3 hrs.
In-depth study of children's development and its assessment from birth through grade three. Emphasis on examining developmental differences among individual children and implications for developmentally and individually appropriate classroom practice. Prerequisite: junior standing. (Offered Fall and Spring)
200:116(g). Psychology of Adolescence - 2 hrs.
Psychological concepts applied to adolescent intellectual, physical, and psychosocial behaviors; designed to improve understanding of, and relationships with, adolescents and their search for identity. Prerequisites: 200:030 or equivalent; junior standing. (Offered Fall and Spring)
200:118(g). Mental Health in the Classroom - 3 hrs.
Basic principles of mental health as they apply to the entirety of the educative enterprise. Focus on causative factors relating to the mental health of teachers and students, and ways of arranging classroom environments which maximize learning and minimize threat and self devaluation. Prerequisites: 200:030 or equivalent; junior standing. (Variable)
200:128. Field Experience: Teacher as Change Agent - $1 \mathbf{h r}$.
Direct experiences to increase understanding of learning process and apply skills for facilitating the process; may include motivation, classroom management, and teaching strategies. Offered on credit/no credit basis only. Prerequisites: 200:017; 200:030; or equivalents. Corequisites: 200:148; 250:150. (Offered Fall and Spring)
200:139(g). Psychology of Personality, Education - 3 hrs.
Thorough investigation of the dynamics of personality, with emphasis on the principles of normal personality structure. Designed for those who seek an understanding of the structure, development, and function of personality. Prerequisite: junior standing. (Offered Fall and Spring)

## 200:140(g). Social Psychology, Education - 3 hrs.

Intensive study of the behavior of man as affected by, and when interacting in, groups. Areas of discussion include prejudice, propaganda, anti-intellectualism, leadership, social perception, group dynamics, game theory, and student protest. Prerequisite: junior standing. (Offered Spring) 200:148. Learning and Instruction in Classroom Contexts - $\mathbf{3}$ hrs.
Examination of the influence of cognitive, motivational, and sociocultural factors on students' learning in classroom contexts, with an emphasis on implications for classroom instruction and improved student achievement. Application of course concepts to the corequisite field experience. Prerequisites: 200:017; 200:030; or equivalents. Prerequisite or corequisite: 250:150. Corequisite: 200:128. (Offered Fall and Spring) 200:151(g). Current Approaches to Classroom Discipline - 3 hrs.
Strategies and processes designed to improve and maintain classroom control which also preserve and enhance atmospheres leading to increased student academic and personal development. Prerequisites: 200:030; 200:148; or equivalents; junior standing. (Offered Fall and Spring) 200:170(g). Psychology of Learning Disabilities - 3 hrs.
Current theories and practices in learning disabilities with emphasis on the foundations of the field, assessment practices, and specific learning disorders. Prerequisites: 200:148 and 250:150 or equivalent; junior standing. (Variable)

## 200:173(g). Behavior Disorders in Children - 3 hrs.

Problems of children who deviate from the norm in behavior and adjustment, including deviations which are organic as well as those which are functional in nature. Observations of clinical procedures. Prerequisite: junior standing. (Offered Fall and Spring)
200:176(g). Learning and Behavioral Problems in Education - 3 hrs.
Learning and behavior problems of students with focus on issues of identification, etiology, assessment, developmental changes, and intervention including consideration of personal, social, cultural, historical, and economic contexts. Prerequisite: junior standing. (Offered Fall and Spring)

## 200:180(g). Community Service: Academic Skills Achievement Center

 -2 hrs.Tutorial experience in multicultural school setting. Collateral seminar for sharing personal insights and discussion of core readings on cultural pluralism. May be repeated once for credit. Prerequisite: junior standing or consent of department head. (Offered Fall and Spring)
200:188(g). Current Approaches to Multicultural Education - 3 hrs.
Comparison of alternative models of multicultural education and study of their application in school settings. Prerequisite: junior standing. (Offered Fall)
200:198. Independent Study.
(Variable)

## 200:214. Foundations of Instructional Psychology - 3 hrs.

Study of factors involved in designing and implementing effective instructional environments. (Offered Fall and Spring)
200:220. Educational Psychology: Classroom Strategies - 3 hrs.
Selected instructional strategies which are extensions of contemporary learning theory that create effective teaching-learning environments. Prerequisites: 200:214 or consent of department. (Offered Fall)

## 200:224. Adult Development and Learning - 3 hrs.

Overview of individual development from young adulthood through middle adulthood. Emphasis is breadth and range of individual growth and development during the adult years. Focus on psychological issues associated with social, emotional, and cognitive development, and adult learning and teaching. (Variable)

## 200:230. Theories of Personality - 3 hrs.

Critical examination of the nature of personality theory, and detailed analysis of the major contemporary theories of personality, (Variable)

## 200:232. Risk and Resilience: Child, Family, School and Community Factors - 3 hrs .

Examination of children's cognitive and psychosocial development within family, school and community contexts, socio-historical factors which impact children, families, schools and communities, and implications for elementary school curricula and pedagogy. (Variable)
200:235. Theories of Human Development - 3 hrs .
Major theories of human development (e.g., psychoanalytic, cognitivy developmental, humanistic, and social learning theory). Includes study of noted theorists in each area and educational implications and applicationa|| of their work. Prerequisite: 200:100 or 200:109 or 200:116. (Variable)
200:240. Introduction to School Psychology - 3 hrs.
Psychological services in schools; roles and functions of school psychologists; review of professional, legal and ethical standards and implication for practice. (Variable)

## 200:241. Cognitive Approaches to Learning and Classroom Practice <br> -3 hrs.

Examination of results and implications of contemporary educational research upon teaching and learning. Emphasis on empirical studies in the areas of learning and developmental psychology. (Variable)
200:280. Psychological Consultation in Schools - 3 hrs.
Overview of major theoretical models of consultation (including systems level consultation), an in-depth opportunity to develop behavioral consultation and intervention skills through an authentic referral, and an emphasis on professional accountability through monitoring the effects of intervention. (Variable)
200:285. Readings.
(Offered Fall and Spring)
200:289. Seminar in Education and Psychology - 1-6 hrs.
Prerequisite: consent of instructor. (Offered Fall and Spring)
200:290. Practicum in Education and Psychology - 1-6 hrs.
Prerequisite: consent of instructor. (Offered Fall and Spring)
200:291. Internship in School Psychology - 1-6 hrs.
Supervised off-campus field experience. (Offered Fall and Spring)
200:299. Research.

## (Offered Fall and Spring)

200:302. Contemporary Instructional Practices - 3 hrs.
Overview of research knowledge base regarding effective instructional practices and their interrelationship in effective schools. Prerequisites: 200:214; doctoral status or consent of college. (Formerly 190:302) (Variable)

## 210 Elementary, Early Childhood, and Middle Level Education

210:120. Elementary Classroom Management - 3 hrs.

Focus on skills needed to plan, organize, manage, implement, and evaluate appropriate instruction in the elementary classroom. Prerequisite: $210: 150$ or $210: 152$. Corerequisites: $210: 161 ; 210: 164 ; 230: 116 ; 800: 134$. (Offered Fall, Spring, and Summer)
210:121(g). Infant and Toddler Care and Education - 3 hrs.
Study of care and education of the very young child. Examination of important strategies and techniques for working with infants and toddlers. Prerequisites: 200:109; junior standing. (Offered Fall, Spring, and Summer)
210:122. Middle Level Classroom Management - 3 hrs.
Middle level/junior high school classroom organization and behavior management compatible with the developmental characteristics of young adolescents. Prerequisite: 210:150 or 210:152. Corequisites for Elementary/Middle Level Education Dual Majors: 210:161; 210:164; 230:116; 800:134. (Offered Fall and Spring)
210:123(g). Expressive Arts in the Elementary School - 3 hrs.
Integration of the creative arts: art, music, drama, and media as utilized
for strengthening and enriching content across the curriculum of the elementary classroom. Prerequisite: junior standing. (Offered Fall, Spring, and Summer)
210:130(g). Guidance and Instruction in Early Childhood Education -
3 hrs.
Discussion of the role of the teacher in guiding young children in their learning activities. Emphasis on planning and implementing early childhood programs. Prerequisites: 210:151; junior standing. Corequisite: 210:192. (Offered Fall and Spring)
210:135(g). Middle Level Socialization and Instruction - 3 hrs.
Instructional strategies and resources for addressing the social, emotional, physical, and intellectual needs of young adolescents in the middle level/junior high school classroom. Prerequisites: 200:116; 200:148; junior standing. (Offered Fall and Spring)

## 210:141(g). Integrated Activities in Elementary School Science and <br> Mathematics - 3 hrs.

Activity based on pedagogical investigation of manipulative materials and activities used in elementary science and mathematics followed by critical analysis using task analysis and research investigations. Prerequisites: 800:134 or equivalent; junior standing. (Offered Spring)

## 210:142(g). Applications in Elementary Science Teaching - 3 hrs.

Resources, content background and materials in elementary science with emphasis on applications. Special attention to integrating theory and practice with techniques, materials, and equipment. Stresses interrelations between the various sciences and application of skill subjects. Prerequisite: junior standing. (Variable)

## 210:143(g). Applications in Elementary Social Studies Teaching -

3 hrs.
Applying knowledge of current trends, resources, and content as a means of developing, enriching, and expanding the social studies curriculum. Prerequisites: 210:164; junior standing. (Offered Fall)

## 210:145(g). Storytelling - 2 hrs.

Art and techniques of storytelling to enrich the elementary classroom learning experiences. Prerequisite: junior standing. (Variable)
210:149(g). Child, Family, School and Community Relationships - 3 hrs. Procedures for developing home-community-school relationships to promote the education of each child in reaching her/his maximum potential. Emphasis on preschool-kindergarten level. Prerequisite: junior standing. (Offered Fall, Spring, and Summer)

## 210:150(g). Middle Level Curriculum - 3 hrs.

Teaching strategies, instructional resources, and school organization designed specifically for meeting the unique needs of young adolescents in the middle level/junior high school setting. Prerequisites: 200:116; completion of Level I of the Professional Education Requirements; junior standing. Prerequisite or corequisite: Level II of the Professional Education Requirements. (Offered Fall and Spring)
210:151(g). Early Childhood Curriculum Development and Organization
-3 hrs.
Current trends in curriculum for preschool and primary children. Prerequisites: completion of Level I of the Professional Education Requirements - Early Childhood Education; junior standing. Prerequisite or corequisite: Level II of the Professional Education Requirements. (Offered Fall, Spring, and Summer)
210:152(g). Elementary Curriculum - 3 hrs.
Recent trends in the curriculum for children in grades K-6. Prerequisite: Completion of Level I of the Professional Education Requirements B Elementary Education; junior standing. Prerequisite or corequisite: Level II of the Professional Education Requirements. (Offered Fall, Spring, and Summer)

## 210:155(g). Constructivist Early Education - 3 hrs.

Overview of theory and practice in constructivist early childhood education. Survey of sociomoral atmosphere (including group time, rule
making, voting, social and moral discussion, academics, etc.), physical knowledge activities, group games, and classroom management. Prerequisite: junior standing. (Variable)
210:161. Teaching Elementary School Science - 3 hrs.
Investigation of current textbook series, trends, teaching materials, and appropriate instructional strategies for contemporary elementary school science programs. Prerequisite: $210: 150$ or $210: 151$ or $210: 152$. Corequisites: $210: 120$ or $210: 122 ; 210: 164 ; 230: 116 ; 800: 134$. (Offered Fall, Spring, and Summer)

## 210:164. Teaching Elementary School Social Studies - 3 hrs.

Basic methods and materials for teaching the knowledge, skills, attitudes and values in social studies. Prerequisite: 210:150 or 210:151 or 210:152. Corequisites: $210: 120$ or $210: 122 ; 210: 161 ; 230: 116 ; 800: 134$. (Offered Fall, Spring, and Summer)
210:192(g). Experience - 2-4 hrs.
May be offered in various specialized fields as indicated in Schedule of Classes, but may be taken only twice for credit in the same area. Prerequisite: successful completion of 200:017 and 200:128; junior standing. Corequisite: 210:130. (Offered Fall and Spring)
210:201. Issues and Trends in Curriculum - 3 hrs.
Current ideas influencing the planning and implementation of curriculum. Prerequisite: consent of department. (Variable)

## 210:204. Curriculum Construction - 3 hrs.

Role of the classroom teacher in curriculum development projects, focusing on educational change process, procedures, and product evaluation. Prerequisite: 210:201 or consent of the head of the Department of Curriculum and Instruction. (Variable)
210:212. Recent Research in Elementary School Science - 3 hrs.
Major philosophical developments as related to changing mode of science instruction. Research on adaptation, management, and control in areas of social-psychological factors and logistical factors. Prerequisite: 210:142 or 210:152 or consent of department. (Variable)
210:214. Recent Research in Early Childhood Education - 3 hrs.
Review of implications of research to gain techniques for improving instruction and programs for young children. Prerequisite: 210:151 or equivalent. (Offered Spring)

## 210:220. Administration and Supervision of Programs for Young Children

 -3 hrs.Preparation to plan, organize, and operate public and private programs for young children, including working with families and with other social agencies, obtaining and administering funds, staffing, providing for health and safety, and curriculum decisions. (Variable)
210:221. Analysis and Design of Curriculum for Young Children - 3 hrs . Basic assumptions underlying curriculum for young children to prepare students to improve teaching practices, and provide direction to future decision making on programs and materials. (Offered Summer)
210:222. Evaluating the Early Childhood Curriculum - 3 hrs.
Preparation for conducting and interpreting ongoing curriculum evaluations and meeting evaluation guidelines for funding purposes. Emphasis on evaluation for effective decision making and curriculum problem solving at local level. Prerequisite: 210:221 or equivalent. (Variable)
210:225. Advanced Constructivist Education - 3 hrs.
Study of theory, research, and curriculum in constructivist education. Selected theoretical topics. Prerequisites: 210:155; 210:221. (Offered Fall) 210:228. Comparative Early Childhood Curricula - 2 hrs.
Comparative study of curricula and programs of early education including the Montessori Method, Bank Street theory and practice, and various programs based on Piagetian theory. Prerequisites: 210:155; 210:221. (Variable)
210:242. Analys is and Improvement of Science Instruction in the
Elementary School - 3 hrs.
Application of developmental psychology to the scope and depth of
science instruction; analysis of strengths and weaknesses of alternative science programs including initial and subsequent costs, facility requirements, and implementation difficulties. Prerequisite: 210:142 or 210:152 or consent of department. (Variable)

## 210:243. Analysis and Improvement of Social Studies Instruction in the

Elementary School - 3 hrs.
Assists teacher in exploring historical and current practices in social studies to create new approaches by using available resources and ideas. Prerequisite: 210:143 or 210:152 or consent of department. (Variable) 210:254. The Gifted and Talented - 3 hrs.
Educational needs of gifted and talented children and youth. Emphasis on characteristics, identification/assessment, special populations, counseling, parenting, and program intervention. (Variable)
210:255. Educational Strategies for Gifted and Talented - 3 hrs.
Current trends in educational programming for the gifted and talented. Prescription, implementation, and evaluation of differentiated curriculum/educational strategies used in the comprehensive program. Prerequisite: 210:254 or consent of instructor. (Variable)
210:257. Coordinating Programs for the Gifted and Talented - 3 hrs .
Methods/procedures for coordinating/directing school district PK-12 programs for the gifted and talented. Emphasis on program planning, management, supervision, and evaluation. Prerequisites: 210:254; 210:255; or consent of instructor. (Variable)
210:270. Recent Developments in Middle Level Curriculum - 3 hrs.
Recent developments regarding curricular decision making, organizational structures, and instructional strategies appropriate for middle and junior high schools based on the developmental characteristics of young adolescents. (Variable)
210:285. Readings in Education - 1-3 hrs.
(Offered Fall, Spring, and Summer)
210:289. Seminar in Education - 2 hrs.
Special topics listed in Schedule of Classes. (Offered 'Fall, Spring, and Summer)
210:297. Practicum - 2-3 hrs.
(Offered Fall, Spring, and Summer)
210:299. Research - 1-6 hrs.
(Offered Fall, Spring, and Summer)
210:352. Curriculum Theory and Development - 3 hrs.
Assists the advanced graduate student in viewing, analyzing, and interpreting the curriculum and instruction program of an educational institution and in developing skills for implementing change. (Variable)
210:354. Curriculum Implementation and Evaluation - 3 hrs.
Exploration of systems for program evaluation and revision and the dynamics of change processes. (Variable)
210:389. Seminar in Curriculum and Instruction - 3 hrs .
Intensive study and seminar presentations of current issues, trends, procedures, and obstacles to change in curriculum and instructional practice. May be repeated. Prerequisite: doctoral status or consent of department. (Variable)

## 210:397. Practicum in Curriculum and Instruction - 2-4 hrs.

Supervised practice in working as a co-facilitator and/or as a facilitator in program evaluation and revision and/or instructional design and improvement in an educational setting. May be repeated for a maximum of 4 hours. Prerequisites: 210:352; consent of instructor. (Offered Fall, Spring, and Summer)

## 220 Special Education

220:050. Introduction to Exceptional Persons - $\mathbf{3}$ hrs.
Overview of the field of Special Education including historical perspective, characteristics, programs, and legal provisions. (Offered Fall and Spring)

## 220:140 (g). Services to Families with Infants and Toddlers with Disabilities - 3 hrs.

Working with families of infants and toddlers with disabilities. Prerequil sites: 220:150; junior standing. Corequisite: 220:192. (Offered Fall)
220:141(g). Including Young Children with Special Needs Into the General Education Programs - 3 hrs.
Advanced best practices for educating young children with diverse learn: ing needs in the general education classroom. Prerequisite: 220:156 220:192 (tutorial); junior standing. Corequisite: 220:192. (Offered Fall and Spring)
220:142(g). Classroom Instructional Management for Students with Disabilities (K-6) - 3 hrs.
Designed to develop the instructional and behavioral managemen competencies required to teach K-6 students with disabilities. Prerequi sites: 220:150; junior standing. Corequisite: 220:192. (Offered Fall and Spring)

## 220:143(g). Classroom Instructional Management for Students with Disabilities (7-12) - 3 hrs .

Designed to develop the instructional and behavioral management competencies required to teach students in grades 7-12 with disabilities Prerequisites: 220:150; junior standing. Corequisite: 220:192. (Offered Spring)
220:146(g). Methodology and Assessment for Students with Mild/ Moderate Disabilities (K-6) - 3 hrs.
Deals with pragmatic knowledge about assessment, methodologies, techniques, and technology related specifically for group instruction of K-6 students with mild/moderate disabilities. Prerequisites: 220:174; juniond standing. Corequisite: 220:192. (Offered Fall and Spring)

## 220:147(g). Methodology and Assessment for Students with Mild/ Moderate Disabilities (7-12) - 3 hrs.

Deals with pragmatic knowledge about assessment, methodologien techniques, and technology related specifically for group instruction of students in grades 7-12 with mild/moderate disabilities. Prerequisited 220:174; junior standing. Corequisite: 220:192. (Offered Fall)
220:148. Professional Interdisciplinary Relationships II - 3 hrs.
Introduces the preservice teacher to skills necessary to work effectively as a professional member of a multidisciplinary team. Skill orientation and development emphasizes the social style concept, communication and collaboration skills, and team building for inclusionary practicea Prerequisites: 220:150; 220:184. (Variable)
220:150. Meeting the Needs of Diverse Learners in Classrooms - 2 hrs. Introduction to pedagogical, curricular, and social considerations involved in educating diverse learners in the general education classroom. Prerequisite: 200:030. (Offered Fall and Spring)
220:151(g). Vocational and Transition Programming for Individuals with Disabilities - 3 hrs.
Development and implementation of work experience and other vocational programs for adolescents and adults with disabilities. Overview of the transition planning process and resources. Prerequisites: 220:174; junior standing. (Offered Fall)
220:152(g). Community Resources for Special Education - 3 hrs.
Study of cooperation and coordination of the school and other agencies serving persons with disabilities, including various programs and services provided by governmental and private organizations. Prerequisites: 220:050 or 220:150; junior standing; consent of instructor. (Variable)
220:153(g). Adaptations for Students with Physical and Sensory Impairments - $\mathbf{3} \mathbf{h r s}$.
Modification of physical structures, equipment, materials, and procedures for students with accompanying physical, sensory and/or multiple impairments. Prerequisites: 220:174 or consent of instructor; junior standing. (Offered Spring)

## 220:155(g). Overview: Teaching the Mildly Disabled and At-Risk Student - 3 hrs.

Introduction to teaching diverse learners in multicategorical resource and general class settings. Focus on service models and trends, program implementation, consultation/collaboration and in-service training. Prerequisites: $\mathbf{2 2 0 : 0 5 0}$ or $\mathbf{2 2 0 : 1 5 0}$; junior standing; consent of department. (Variable)

## $220: 167(\mathrm{~g})$. Overview of Education of Students with Mental Disabilities -2 hrs.

Current and historical educational trends, etiology, and impact of disability on the child and family. Prerequisites: 220:050 or 220:150; junior standing. (Offered Fall)

## 220:170(g). Educational Management in Special Education - 3 hrs.

Individual behavior management, behavioral change strategies, and classroom management for students with special needs. Prerequisites: 220:050; junior standing. Corequisites: 220:174; 220:192. (Offered Fall and Spring)
220:174(g). Assessment and Instruction for Students with Mild
Disabilities - 3 hrs.
Collection and use of educational data to assess and teach students with diverse learning needs, educational planning, material adaptation, and curriculum development. Prerequisites: 220:150; junior standing. Corequisites: 220:170; 220:192. (Offered Fall and Spring)

## 220:183(g). Teaching Secondary-Level Students with Severe Disabilities

 -3 hrs.Instructional methods, materials, and assessment for secondary-level students with severe disabilities; emphasis on strategies to support students within the inclusive classroom and promote transition. Prerequisites: 220:167; 220:174; junior standing. Corequisite: 220:192 or consent of instructor. (Offered Fall)

## 220:184(g). Professional Interdisciplinary Relationships in Special

Education I-3 hrs.
Development of professional behaviors characterized by positive personal interaction with others and effective team skills. Strategies for collaborating with parents, regular and special educators, paraprofessionals, and other individuals in the educational program. Prerequisites: 220:050 or $220: 150$; junior standing. (Offered Fall and Spring)

## 220:185(g). Readings in Special Education - 1-2 hrs.

Reading and discussion of current methodological developments and innovations in special education. May be repeated once for a maximum of 2 hours. Prerequisite: junior standing. (Offered Fall, Spring, and Summer) 220:187(g). Teaching Elementary School Students with Severe

Disabilities - $\mathbf{3}$ hrs.
Instructional methods, materials, and assessment for students with severe disabilities in the inclusive classroom. Emphasis on strategies for supporting students with significant needs in the general education classroom. Prerequisites: 220:167 or consent of instructor; junior standing. Corequisite: 220:192 or consent of instructor. (Offered Spring)

## 220:192(g). Experience in Special Education - 3 hrs.

Supervised assessment and teaching experience in special education as listed in the Schedule of Classes. May be repeated in different areas for up to 12 hours. Offered credit/no credit option only. Section 29 (Early Childhood, Birth-3) may be taken for 1-3 hours, and is graded credit. Prerequisites: junior standing; consent of instructor. (Offered Fall and Spring)
220:240. Collaborative Consultation I: The Relationship - 3 hrs.
Emphasis on the psychological and behavioral considerations involved in successfully forming and maintaining a collaborative consulting relationship. In-depth topics include self-management, personality style and versatility, starting the relationship, and establishing one's role with the group and individual. (Offered Fall)
220:245. Collaborative Consultation II: The Process - 3 hrs.
Provides in-depth understanding and beginning execution of a system-
atic model of collaborative consulting including four processes or sets of procedures for carrying out the model. Emphasis on planning, problem clarification and analysis, teaching and teacher strategy, presenting solutions, and dealing with teacher concerns and fears. (Offered Spring)
220:254. Vocational and Transition Assessment of Individuals with
Disabilities - 3 hrs.
Assessment and application of techniques for professionals working with adolescents or adults with disabilities. Designed for those interested in vocational and transition programming for individuals with disabilities. Prerequisite: 220:151 or consent of instructor. (Variable)
220:256. Best Practices in Inclusion - 3 hrs.
Provides preparation in pedagogical, curricular, and professional collaboration practices, and provides knowledge of empirical, legal, and historical considerations integral to the accommodation of all learners into the general education classroom. Prerequisite: graduate standing. (Variable) 220:260. Special Education Law and Policy - 3 hrs.
Provides information and conceptual understanding of legislative, executive, and judicial action affecting special education programs for children and youth with disabilities. Prerequisite: graduate standing. (Offered Fall and Spring)
220:278. Administration of Special Education - 3 hrs.
Prepares administrators to plan programs for various areas of special education, select and evaluate personnel, provide instructional materials, interpret the program to the community, and be informed concerning legal provisions for special education. (Variable)
220:289. Seminar - 3 hrs.
May be repeated on different topics for maximum of 9 hours. Prerequisites: 220:183 or 220:187; 220:192. (Offered Fall)

## 220:290. Practicum - 1-6 hrs.

Requires written consent of department. May be repeated for maximum of 9 hours. (Offered Fall and Spring)

## 220:293. Qualitative Research in Special Education - 3 hrs .

In-depth methodological understanding of qualitative research and the opportunity to conduct qualitative research projects in special educational settings. Prerequisite: 250:205. (Offered Fall) 220:295. Single-subject Research Applications - 3 hrs.
In-depth understanding of single-subject methodology for conducting applied research projects in educational settings. Participation in an applied research project with emphasis on the relationship between applied research and best practices in teaching persons with disabilities. (Offered Spring)
220:299. Research - 2-3 hrs.
May be repeated for maximum of 6 hours. (Offered Fall and Spring) 220:340. Disability, Culture, and Educational Leadership - 3 hrs.
Introduction to theory and practice in educational leadership related to changing cultural and societal understanding of disability. Prerequisite: master's degree in Special Education, Educational Leadership, or the Principalship certification. (Variable)

## 230 Literacy Education

## 230:044. Children's Literature - 3 hrs.

Evaluation, selection, and teaching of literature in the elementary school language arts program. (Offered Fall and Spring)

## 230:115. Methods of Teaching Early Literacy - 3 hrs.

Reading and writing instrucțion in grades prekindergarten-3, with an emphasis on integrating reading, writing, speaking, and listening, as well as integration across content areas. Prerequisite or corequisite: 230:044. (Offered Fall, Spring, and Summer)
230:116. Methods of Teaching Literacy in the Intermediate Grades -
3 hrs.
Reading and writing instruction in grades 3-6, with an emphasis on in-
tegrating reading, writing, speaking, and listening, as well as integration across content areas. Prerequisites: 210:150 or 210:152; 230:044; 230:115 (prerequisite or corequisite); completion of Levels I and II of Professional Education Requirements; junior standing. (Offered Fall, Spring, and Summer)

## 230:117(g). Methods of Teaching Literacy at the Middle and Secondary <br> Levels - 3 hrs.

Literacy instruction in the middle and secondary grades, including understanding the reading process, literacy across the curriculum, improving fluency, and assessment of literacy. Prerequisites: completion of Levels I and II Professional Education requirements; junior standing. (Formerly $230: 130 \mathrm{~g}$ ) (Offered Fall and Spring)

## 230:119. Emergent Literacy and Language Development - 3 hrs.

Theories underlying young children's acquisition of oral language and early reading and writing. Emphasis on implications for literacy curriculum in the primary grades. Prerequisites: 230:044 and one of the following: $230: 115,230: 116$ or $230: 117$ or consent of instructor; junior standing. Students must earn a grade of B or above in Literacy Education minor courses numbered $230: 119$ or above and have a cumulative and UNI GPA of 3.00 or higher to enroll in this course. (Formerly 230:111g) (Offered Fall, Spring, and even Summers)

## 230:121. Advanced Children's Literature - 3 hrs .

Issues and trends in children's literature, including use in elementary school programs. Focus on values, uses, and controversies related to children's literature by and about major American minority groups, including ethnic, religious, and socioeconomic minorities. Prerequisites: 230:044; junior standing. Students must earn a grade of B or above in Literacy Education minor courses numbered $230: 119$ or above and have a cumulative and UNI GPA of 3.00 or higher to enroll in this course. (Offered Fall, Spring, and odd Summers)

## 230:140. Assessment and Evaluation of Literacy - 3 hrs.

Introductory course in evaluating the reading and language abilities of individual children through instruction within a classroom setting. Includes group and individual evaluation, informal assessment procedures, selection of materials, and instructional strategies to meet the needs of individual learners. Prerequisites: 230:044 or 620:165; 230:115, 230:116, or 230:117; 230:119 or 230:121; or consent of instructor; junior standing. Students must earn a grade of B or above in Literacy Education minor courses numbered 230:119 or above and have a cumulative and UNI GPA of 3.00 or higher to enroll in this course. (Offered Fall, Spring, and Summer)
230:147. Remedial Reading - 3 hrs.
Selection, implementation, and interpretation of a variety of reading and language arts assessment procedures and the development of effective individualized instructional programs. Prerequisites: 230:044 or 620:165; $\mathbf{2 3 0}: 115,230: 116$, or $230: 117 ; 230: 119$ or $230: 121 ; 230: 140$; or consent of instructor; junior standing. Students must earn a grade of $B$ or above in Literacy Education minor courses numbered 230:119 or above and have a cumulative and UNI GPA of 3.00 or higher to enroll in this course. (Offered Fall, Spring, and Summer)

## 230:155(g). Grammar for Middle Level Educators - 1 hr .

The structure of English grammar and best practices for teaching grammar at the middle level will be examined. This course fulfills lowa Department of Education Middle Level Endorsement requirements for course work in grammar. Prerequisite: junior standing. (Offered Fall and Spring)

## 230:192. Experience in Reading: Tutoring - 3 hrs .

Supervised tutoring in the University Reading Center or in a public school Reading Center. Prerequisites: 230:140; junior standing. Students must earn a grade of B or above in Literacy Education minor courses numbered 230:119 or above and have a cumulative and UNI GPA of 3.00 or higher to enroll in this course. Corequisite: 230:147. (Offered Fall, Spring, and Summer)

## 230:193(g). Experience in Reading: Field - 1-2 hrs.

Supervised experience teaching in elementary or secondary reading programs. May be repeated for a maximum of 4 hours. Prerequisites: junio, standing. Students must earn a grade of B or above in Literacy Educationd minor courses numbered $230: 119$ or above and have a cumulative and UNI GPA of 3.00 or higher to enroll in this course. (Offered Fall, Spring) and Summer)

## 230:212. Methods and Materials in Literacy Education - 3 hrs.

Integrated approach to language learning within and across grades $\mathrm{K}-12$, with a strong emphasis on reading and writing connections within content areas and across children's and young adult literature. Prerequisited graduate standing; previous course work in literacy education or consent of instructor. (Variable)

## 230:238. Advanced Assessment and Evaluation of Literacy Development

 -3 hrs.Experience in assessment and evaluation of literacy processes. Survey of interrelationship of assessment and evaluation to literacy developmenf including current issues and practices. Prerequisites: graduate standingir previous course work in literacy education, or consent of instructor (Variable)
230.239. Advanced Literacy Studies - 3 hrs.

Students locate, read, examine, analyze, and evaluate a variety of historicet and contemporary literacy research piece; make plans for research studies and write literature reviews, conference and grant proposals. Prerequiw sites: graduate standing, $250: 205$, or consent of instructor. (Variable)
230:240. Language Development and Variability - 3 hrs.
Exploration of research on factors generally associated with variability in language and literacy development, on methods designed to promote language and literacy development, and on roles of teachers and parents in promoting this development in children with differences. Prerequi $\sim$ sites: graduate standing, previous course work in literacy education, or consent of instructor. (Variable)
230:245. Critical Issues in Children's Literature - 3 hrs.
Advanced literacy course exploring ideological, cultural, social, and political issues in children's literature. Study in sociocultural contexts of literacy instruction, with critical analysis of literature as an instrument to inform and transform life as well as learning. Prerequisite: 230:044 or consent of instructor. (Variable)
230:247. Remedial Reading - 3 hrs.
Selection, implementation, and interpretation of a variety of literacy assessment procedures and the development of effective individualized instructional programs. Prerequisite: 230:140 or 230:238 or written consent of instructor. Corequisite: 230:292. (Variable)
230:260. Roles of the Reading Specialist - 3 hrs .
Exploration of the five major leadership roles required of school personnel who serve as reading and language arts specialists. Prerequisite: graduate standing or consent of instructor. (Variable)
230:289. Seminar - 2-4 hrs.
Seminar topics to be announced in Schedule of Classes. May be repeated for maximum of 4 hours. Prerequisite: consent of instructor. (Variable)

## 230:290. Practicum - 2-4 hrs.

Supervised experience in teaching and/or supervision of instruction. May be repeated for maximum of 4 hours. Prerequisite: consent of instructor. (Offered Fall, Spring, and Summer)
230:292. Experience in Reading: Tutoring - 3 hrs.
Supervised tutoring in the field, involving assessment procedures and literacy instruction. Prerequisite: 230:140 or 230:238 or written consent of instructor. Corequisite: 230:247. (Variable)

## 230:299. Research - 1-6 hrs.

Intended as the final course in the Curriculum and Instruction: Literacy Education program, focuses on completion of final research project and preparation for comprehensive examination in a collaborative seminar
setting. Thesis requires a total of 6 hours. Non thesis requires a total of 3 hours. (Offered Fall, Spring, and Summer)

## 230:354. Curriculum Development and Evaluation in Reading/Language

Arts - 3 hrs.
Current models, methodologies, and decision-making approaches for development and evaluation of K-12 programs. Prerequisite: 210:352. (Variable)

## 230:389. Seminar in Reading - 1 hr .

Series of one-hour seminars to accompany doctoral work in statistics, research, and practicum experiences. May be repeated for maximum of 3 hours. Prerequisite: consent of instructor. (Variable)
230:397. Practicum in Reading - $2-4$ hrs.
Supervised professional experience teaching reading education courses at the university level or participating in reading program supervision and consulting within a school district. May be repeated for maximum of 4 hours. Prerequisite: consent of instructor. (Variable)

## 240 Instructional Technology

240:020. Educational Media - 2 hrs .

Selection and use of various educational technologies within a systematic educational planning framework. Includes the operation of educational media hardware and software and the design and production of media for educational use. Lab as arranged. (Offered Fall, Spring, and Summer)
240:030. Classroom Computer Applications - 3 hrs.
Use of microcomputer technology in the classroom. Emphasis on evaluating instructional software and integrating computer technology with common teaching/learning practices. Prerequisite: 240:020 or 240:031. (Offered Spring)
240:031 Educational Media and Classroom Computing - 3 hrs.
Role of educational media and computers in the teaching-learning process. Selection, preparation, utilization, and evaluation of media and computer software for educational use. Lab as arranged. (Offered Fall, Spring, and Summer)

## 240:131(g). Technology in Education - 3 hrs.

Issues confronting contemporary education and the effective integration of technology to support learning. Investigation of the historical, social and scientific uses of technology in education from various perspectives. Prerequisite: junior standing. (Offered Fall)
240:138(g). Visual Literacy - 3 hrs.
Focus on examining aspects of visual design. Interpretation and design of visuals that facilitate communication. Prerequisite: junior standing. (Offered Spring)
240:139(g). Media Planning and Production - 3 hrs.
Planning steps essential for media production; processes, equipment, techniques, and services needed for the production, duplication, and release of media. Lab as arranged. Prerequisites: 240:020 or 240:031 or consent of instructor; junior standing. (Offered Fall, Spring, and Summer)
240:140(g). Using Databases in Education - 3 hrs.
Introduction to using databases and informational retrieval systems in an educational setting. Emphasis on basic concept and skills of databasing and experiencing ways that databases can be used in a teaching method to emphasize problem-solving. Exploration beyond personal computer databases to using and integrating Internet resources into classroom curriculum. Prerequisites: 240:020 or 240:031; junior standing. (Offered Fall and Summer)

## 240:147(g). Digital Imaging - 3 hrs.

Focus on basic principles, skills, and techniques of preparing digital images. Lab as arranged. Prerequisite: junior standing. (Offered Fall and Summer)
240:150 (g). Instructional Television Production - 3 hrs.
Theoretical aspects and techniques of educational television production
applied in the classroom and studio. Practical experiences in planning and producing educational television programs. Lab as arranged. Prerequisites: 240:139; junior standing; consent of instructor. (Offered Spring) 240:153(g). Telecommunications in Education - 3 hrs.
Study of the technologies of telecommunications applied to education. Administrative and instructional uses, teaching strategies, critical issues, case studies, and research. Prerequisites: 240:030 or 240:139; junior standing; consent of instructor. (Offered Fall and Summer)

## 240:160. Media Projects - 1-4 hrs.

Specialized study in independent media projects. Credit to be determined at time of registration; project, credit and evaluation criteria require advance consent of instructor.

Sec. 1. Computer Applications. Prerequisite: 240:020 or 240:031.
Sec. 2. Digital Imaging. Prerequisite: 240:147.
Sec. 3. Learning Environments.
Sec. 4. Multi-Media Authoring. Prerequisite: 240:030.
Sec. 5. Television. Prerequisite: 240:150.
Sec. 6. Visualization.
Sec. 7. Web Development. Prerequisite: 240:020 or 240:031.
May be repeated for maximum of 4 hours for any section.
(Offered Fall, Spring, and Summer)
240:170(g). The Principles of Publication Design - 3 hrs.
Focus on evaluation and design of electronically-produced materials. Hands-on experiences with desktop publishing. Prerequisite: junior standing. (Offered Fall, Spring, and Summer)
240:186. Studies in Media - 1-4 hrs.
(Offered Fall, Spring, and Summer)
240:189. Readings in Media - 1-3 hrs.
(Offered Fall, Spring, and Summer)
240:205. Instructional Computing Design - 3 hrs.
Evaluation and design of computer-based instructional materials. Handson experiences with the design of computer-based lessons. Prerequisite: 240:240. (Offered Spring and Summer)

## 240:210. Distance Education - 3 hrs .

Introduction to distance education. Föcus on historical perspectives, theories, research, and operational issues. (Offered Spring)
240:230. Communication Theory in Medie - 3 hrs.
Contemporary theory of human and mass communication, learning, perception, and propaganda as they apply to message design utilizing communication media. (Offered Spring)

## 240:232. Selection and Integration of Materials - 3 hrs.

Evaluation of the instructional setting along with the procedures for selection and integration of materials. (Variable)
240:235. Managing Educational Technology Programs - 3 hrs.
Advanced course to prepare a media graduate to administer any one or all of the specific areas of media. (Offered Fall)
240:237. Coordinating Technology in an Educational Setting - 3 hrs.
Examination of the many roles assumed by a technology coordinator in an educational setting. Exploration of the processes of technology planning, management, and support in both theory and through practical applications. (Offered Spring)
240:240. Instructional Development - 3 hrs.
Analysis and synthesis for structuring learning environments including learner, task, environmental, and instractional strategy analysis. (Offered Fall)

## 240:245. Applied Instructional Design - 3 hrs.

Application of current research and theory into the instructional design process. Prerequisite: 240:240. (Offered Spring)
240:260. Advanced Media Projects - 1-4 hrs.
Specialized study in independent media projects. Credit to be determined at time of registration; project, credit, and evaluation criteria require advance consent of instructor.

Sec. 1. Computer Applications. Prerequisite: 240:139.
Sec. 2. Digital Imaging. Prerequisite: 240:147.
Sec. 3. Learning Environments.
$\mathrm{Sec}, 4$. Multimedia Authoring.
Sec. 5. Television. Prerequisite: 240:150.
Sec. 6. Visualization.
Sec. 7. Web Development. Prerequisite: 240:170.
May be repeated for maximum of 4 hours for any section.
(Offered Fall, Spring, and Summer)
240:285. Readings in Media - 1-3 hrs.
Review of individualized selected readings in an area of emphasis as determined by instructor and student. May be repeated for maximum of 3 hours. (Offered Fall, Spring, and Summer)

## 240:286. Studies in Media - 1-4 hrs.

Individualized study of a specific problem or application in an area as determined by instructor and student. (Offered Fall, Spring, and Summer) 240:289. Seminar - 1 hr .
Special topics listed in schedule of classes. May be repeated on different topics for maximum of 3 hours. (Offered Fall, Spring, and Summer)

## 240:297. Practicum - 2-3 hrs.

(Offered Fall, Spring, and Summer)
240:299. Research.
(Offered Fall, Spring, and Summer)
240:340. Designing Instructional Systems - 3 hrs.
Application of current research and theory to the instructional design process. Systematic process of translating principles of learning and instruction, employing several instructional design models. (Variable)

## 250 Measurement and Research

250:150. Classroom Assessment - 2 hrs.
Introduction to classroom assessment. Topics include: principles of preparation and appropriate use of teacher-constructed assessment instruments; methods of reporting assessment information; and purposes and interpretation of standardized test scores. Prerequisites: 200:017; 200:030. Prerequisites or corequisites: 200:128; 200:148. (Offered Fall and Spring) 250:180(g). Statistical Methods in Education - 3 hrs.
Introduction to statistical methods. Includes graphing techniques, measures of central tendency and variability, correlation, $t$-tests, one-way ANOVA, and chi-square. Prerequisite: junior standing. (Offered Fall and Spring)
250:181(g). Educational Evaluation in Teaching - 3 hrs.
Principles of measurement and evaluation in the elementary, secondary, and postsecondary schools. Test construction techniques for written tests and performance tests, with norm-referenced and criterion-referenced interpretations; uses of teacher-made instruments and standardized tests. Prerequisites: 200:148; 250:150 or equivalent; junior standing. (Variable)
250:205. Educational Research - 3 hrs.
Evaluation of educational research concepts, including purposes, hypotheses, principles of research design, data collection, and interpretation of results. (Offered Fall and Spring)

## 250:270. Educational Program Evaluation - 3 hrs.

Examination of models, data-gathering methods, analysis, and report preparation for educational program evaluation; attention to application of evaluation research to specific school and non-school settings. (Variable)

## 250:280. Theory and Construction of Tests —2 hrs.

Advanced course in the theory of test construction and practical application of the theory to actual construction and validation processes. Prerequisites: 250:180; 250:181. (Variable)
250:281. Statistics and Measurement - 3 hrs .
Application of statistical principles to research in school psychology. Top-
ics selected from correlational analysis; reliability and validity; analysis, of variance; sampling; chi-square, t , and F distributions. Emphasis on statisy tical inference and basic measurement principles. Prerequisite: 250:180 or the equivalent. (Offered Fall)
250:282. Individual Intellectual Assessment - 3 hrs.
Standardization, cross-validation, administration, scoring, and elemend tary interpretation of Stanford-Binet Scale, Wechsler Preschool and Primary Scale, Wechsler Intelligence Scale for Children, Wechsler Adult Intelligence Scale. (Variable)

## 250:283. Psychodiagnostics - 3 hrs.

Ecological approach to student assessment; development of record review, interview, and observation skills; ethical considerations and measurement principles. (Variable)
250:284. Advanced Psychodiagnostics - 3 hrs.
Tests of academic and socio-emotional development of individual students, including interpretation and dissemination of results; ethical considerations and measurement principles. (Variable)
250:285. Readings.
(Variable)

## 250:289. Seminar in Evaluation and Research.

(Variable)
250:299. Research.
(Variable)
250:300. Descriptive Educational Research - 3 hrs.
Examination of theoretical and practical aspects of survey research including sampling, instrumental design and administration, and application of computer techniques to the analysis of survey information. Prerequisitead $250: 180 ; 250: 205 ; 250: 281$; or consent of department. (Variable)
250:301. Advanced Experimental Research in Education - 3 hrs.
Relationships between scientific research, theory construction and ethical principles; true-experimental and quasi-experimental designs; univariate, factorial, and multivariate analyses with appropriate computen applications; critical review of experimental literature and preparationd of research manuscripts. Prerequisites: 250:180; 250:205; 250:281; or consent of department. (Variable)

## 250:310. Advanced Qualitative Methods in Educational Research - <br> 3 hrs.

In depth examination of the practice of qualitative inquiry. Focus on field work project leading to potentially publishable paper. Prerequisitess 190:305; consent of department.

## 260 Social Foundations

260:020. Introduction to Teaching as a Profession - 3 hrs.
For the undecided individual to explore the personal and professional considerations associated with a decision to teach. (Offered Fall and Spring)

## 260:119. Schools and American Society - 3 hrs.

Relationship of schools and American society from sociological, historical, philosophical, political, and economic perspectives. Focus on central characteristics of the educational system and influence of these on teachers as professionals and teaching as a profession. Prerequisites: 200:128; 200:148; 250:150. (Offered Fall and Spring)
260:120(g). Sociology of Education - 3 hrs.
Examination of the sociology of classroom learning and the role of schooling in social stratification and social mobility. Prerequisite: junior standing. (Variable)

## 260:121(g). Rural Education: Field Study - 2 hrs.

Study of the sociology of education in a village or town of fewer than 2,500 people, with visits and participation in school and non-school sites to study the school(s) and related community. Prerequisites: 200:128; $200: 148 ; 250: 150 ; 260: 119$; junior standing. (Variable)

260:134(g). History of Education - 3 hrs.
Education as a formal institution; emphasis on the historical antecedents which have affected education in Western Culture and America. Prerequisite: junior standing. (Variable)
$\mathbf{2 6 0 : 1 3 5 ( g ) . ~ R e f o r m ~ M o v e m e n t s ~ i n ~ E d u c a t i o n ~ - ~} 3 \mathrm{hrs}$.
Criticism of American schooling developed since the 1950s; social implications of various movements to reform the schools, establish alternatives to schools, and to deschool society. Prerequisite: junior standing. (Variable)
$260: 138(\mathrm{~g})$. Comparative Education - 3 hrs .
Panoramic view of the educational systems of various nations of the world compared with the education of the United States of America. Prerequisite: junior standing. (Variable)
260:234. Philosophy of Education - 3 hrs.
Analytical study of major philosophical viewpoints of modern education, emphasis on professional problems of education and the development of educational principles. (Offered Fall and Spring)
260:299. Research.
(Variable)

## 270 Educational Leadership

270:198. Independent Study.
(Variable)
270:206. Orientation to Educational Leadership - 1 hr .
Orientation to study of school leadership, historical development of schools, philosophical perspectives impacting educational practices, and issues and trends influencing educational developments. Corequisite: 270:232. (Offered Fall)

## 270:208. Personal and Professional Development - 1 hr.

Examination of concepts of educational and leadership ethics, personal characteristics and ability for educational leadership roles, and necessary skills to deal with stress and demands of leading an educational organization. Prerequisites: 270:206; 270:224; 270:232; or corequisite: 270:280. (Offered Summer)

## 270:224. Organizational Studies - 3 hrs.

Provides knowledge base for study of contemporary and classical thought on organization behavior and organization development in schools. Prerequisites: 270:206; 270:232; or consent of instructor. (Offered Summer)
270:232. School Governance, Law and Intersystems Relations - 3 hrs.
Development of knowledge of the many aspects of local, regional, state, and federal governance of public schools, legal issues, school funding, respect for people's rights, and competence in managing school risk to avoid legal liability. Corequisite: 270:206. (Offered Fall)
270:245. Leadership - 3 hrs.
Study of contemporary leadership, change, and staff development in school organizations. Prerequisites: 270:206; 270:208; 270:224; 270:232; 270:247; 270:249; 270:280: 270:284; or consent of instructor. (Offered Fall)
270:247. Organization Management: School and Community - 3 hrs.
Examination of the key administrative concepts and techniques employed by effective school principals. Prerequisites: 270:206; 270:208; 270:224; 270:232; 270:280; 270:284; or consent of instructor. (Offered Summer) 270:249. Curriculum and Instruction - 3 hrs.
Knowledge and skills for elementary and secondary principals in providing leadership in curriculum development practices commensurate with individual, school, and community belief systems. Prerequisites: 270:206; 270:208; 270:224; 270:232; 270:280; or consent of instructor. (Offered Summer)
270:280. Technology - 2 hrs.
Development of computer skills in areas of word processing, data base, and spreadsheet applications. Emphasis on applications of current
technology and the development of a technology plan within a school system. Prerequisites: 270:206; 270:224; 270:232; or consent of instructor. (Offered Summer)
270:282. Change and Transformation - 3 hrs.
Integration of knowledge about leadership, change, and staff development into a holistic vision of leading a school transformation project. Prerequisites: 270:206; 270:208; 270:224; 270:232; 270:245; 270:247; 270:249; 270:280; 270:284; or consent of instructor. (Offered Spring) 270:284. Facilitating Professional Growth - 3 hrs.
Development of knowledge of various problems and procedures in the organization of elementary and secondary school professional growth. Special emphasis on supervision processes and identifying and analyzing effective teaching and performance behaviors. Prerequisites: 270:206; 270:208; 270:224; 270:232; 270:247; 270:249; 270:280; or consent of instructor. (Offered Spring)
270:285. Readings in Educational Leadership - 1-3 hrs.
Prerequisite: written consent of instructor. (Offered Fall, Spring, and Summer)
270:289. Seminar in Educational Leadership.
Seminars offered on special topics as indicated in the Schedule of Classes. (Variable)
270:290. Practicum in Principalship - 2-4 hrs.
Offered on credit/no credit basis only. Prerequisite: Practicum integrated throughout program. (Offered Fall, Spring, and Summer)

## 270:299. Research.

(Variable)
270:308. Organizational Processes and Communication - 3 hrs.
Organizational development in the school setting. Examination of organizational and communication models and processes with emphasis on interaction patterns, interpersonal relations and interpersonal influence. Prerequisite: doctoral status or consent of department. (Same as 170:310) (Formerly 190:310) (Variable)
270:310. Human Resource Administration - 3 hrs.
Teacher selection and placement, promotion, tenure, and retirement; administration of pupil personnel facilitating services. (Offered Fall)
270:311. Educational Leadership and Systems Change - 3 hrs.
Examination of knowledge base for both change and leadership. Emphasis on understanding how change factors and leadership styles interact to influence receptiveness to and acceptance of change. Prerequisite: doctoral status or consent of college. (Same as 170:311) (Formerly 190:311) (Variable)
270:314. Introduction to the Superintendency - 3 hrs.
Introduction to study of the superintendency to gain familiarity with various aspects and challenges facing superintendents, to develop understanding of the dynamics which affect superintendent's behaviors, and to develop an understanding of the specific responsibilities of the superintendency. Prerequisite: master's degree in Educational Leadership or the Principalship certification. (Offered Spring)
270:320. Curriculum/Program Assessment/Accountability - 3 hrs.
Provides superintendency students with an expanded knowledge base of the processes of curriculum planning and development, instructional management, and program evaluation. Prerequisite: a master's degree in Educational Leadership or the Principalship certification. (Offered Summer)
270:325. Organization, Governance, and Administration of Public
Education - 3 hrs.
Analysis of theories of organization and management models; examination of governance, function, and administration of local, intermediate, state, and federal education agencies. Prerequisite: one course in management or administration in education or consent of department. (Offered Summer)

## 270:330. Technology for Administrative Instructional Leadership 3 hrs.

Provides expanded knowledge base of the processes for gathering, analyzing, and using data for informed decision making as well as experiences with utilizing computers and other technologies connected with instruction and educational programming. Prerequisite: a master's degree in Educational Leadership or the Principalship certification. (Offered Summer)

## 270:338. Safe, Effective, and Efficient Enviromment - 3 hrs.

Provides familiarity with issues and challenges of school safety, school climate and discipline, school crises planning, personal safety, school security, parent and community roles in crime and crisis prevention; emphasis on proactive rather than reactive approach. Prerequisite: master's degree in Educational Leadership or the Principalship certification. (Offered Summer)

## 270:340. Educational Finance - 3 hrs .

Financial support for education; emphasis on lowa. (Offered Fall)
270:342. Decision Making — 2 hrs.
Environmental and personnel factors influencing decision making; emphasis on process, competencies, and consequences. (Variable)
270:346. School Business Management - 3 hrs.
Develops the rationale for the function of school business administration. Assists school administrators in managing business affairs and auxiliary services of the school district. Prerequisites: 270:340; master's degree in Educational Leadership or the Principalship certification. (Offered Spring)
270:354. Collective Bargaining in the Public Sector - $\mathbf{3}$ hrs.
Basic principles of collective bargaining as they apply to educational administration. (Offered Spring)

## 270:363. Administrative and Organizational Theory in Education - <br> 3 hrs.

Examination of contemporary and classical thought related to organizational dynamics and administrative leadership and decision making in the public sector. Limited to post-master's students. (Offered Spring and Summer)
270:385. Readings in Educational Leadership - 1-3 hrs.
Individualized list of selected readings in an area of emphasis, as determined by instructor and student. Prerequisite: written consent of instructor. (Offered Fall and Spring)

## 270:389. Seminar in Educational Leadership - 2-3 hrs.

Offered on special topics as determined and scheduled by the department. May be repeated for maximum of 6 hours. Limited to post-master's students. (Variable)
270:391. Internship in Educational Leadership - 1-4 hrs.
Advanced supervised experience to further develop skills. May be repeated. Offered on credit/no credit basis only. Prerequisite: consent of advisor. (Variable)

## 270:397. Practicum in Educational Leadership - 2-4 hrs.

May be repeated. Offered on credit/no credit basis only. Limited to postmaster's students. Prerequisite: consent of advisor. (Offered Fall and Spring)

## 280 Teaching

280:070. Human Relations: Awareness and Application - 3 hrs.
Development of awareness of various societal subgroups, recognizing and dealing with dehumanizing biases, and learning to relate effectively to various groups in order to foster respect for human diversity. Emphasis on self-awareness in human relations issues and how this awareness can be translated into positive relationships with others. (Offered Fall, Spring, and Summer)

## 280:132. Early Childhood Teaching - 4-12 hrs.

Offered on credit/no credit basis only. Prerequisite: Completion of Level I and II of the Professional Education Requirements. Provides the student the opportunity to experience, in depth, the full role and meaning of teaching in a school setting. Experiences include planning and organizirn for instruction, developing classroom teaching competencies and skille, evaluating pupil progress, participating in extra-class activities, workd ing with special school personnel, and utilizing school and communit) resources in the instructional program. (Offered Fall, Spring, and Summer)

## 280:134. Elementary Teaching - 4-12 hrs.

Offered on credit/no credit basis only. Prerequisite: Completion of Levela I and II of the Professional Education Requirements. Provides the student the opportunity to experience, in depth, the full role and meaning of teaching in a school setting. Experiences include planning and organizind for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program. (Offered Fall and Spring)
280:135. Special Education Teaching - 4-12 hrs.
Offered on credit/no credit basis only. Prerequisite: Completion of Levels I and 11 of the Professional Education Requirements. Provides the student the opportunity to experience, in depth, the full role and meaning of teaching in a school setting. Experiences include planning and organizin| for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, workin, with special school personnel, and utilizing school and community resources in the instructional program. (Offered Fall and Spring)
280:137. Widdle School/Junior High Teaching - 4-12 hrs.
Offered on credit/no credit basis only. Prerequisite: Completion of Levels 1 and 11 of the Professional Education Requirements. Provides the student the opportunity to experience, in depth, the full role and meaning of teaching in a school setting. Experiences include planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program. (Offered Fall and Spring)
280:138. Secondary School Teaching - 4-12 hrs.
Offered on credit/no credit basis only. Prerequisite: Completion of Levels I and 11 of the Professional Education Requirements. Provides the student the opportunity to experience, in depth, the full role and meaning of teaching in a school setting. Experiences include planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program. (Offered Fall and Spring)
280:139. Vocational/Technical Teaching - 4-12 hrs.
Offered on credit/no credit basis only. Prerequisite: Completion of Levels I and II of the Professional Education Requirements. Provides the student the opportunity to experience, in depth, the full role and meaning of teaching in a school setting. Experiences include planning and organizing for instruction, developing classroom teaching competencies and skills, evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program. (Offered Fall and Spring)
280:140. Special Area Teaching: Art, ESL, Music, and Physical Education - 4-12 hrs.
Offered on credit/no credit basis only. Prerequisite: Completion of Levels I and Il of the Professional Education Requirements. Provides the student the opportunity to experience, in depth, the full role and meaning of teaching in a school setting. Experiences include planning and organizing for instruction, developing classroom teaching competencies and skills,
evaluating pupil progress, participating in extra-class activities, working with special school personnel, and utilizing school and community resources in the instructional program. (Offered Fall and Spring)
280:150. Laboratory Practice - Elementary(*).
(Variable)
280:151. Laboratory Practice - Secondary (*).
(Variable)
(*)For experienced teachers (*elementary or secondary, as appropriate) who have not fulfilled the student teaching requirements for certification and to provide an in-depth experience. Includes practice in modern teaching procedures, construction and use of classroom instructional materials, analysis of the teaching-learning process, meeting needs of exceptional children, classroom supervision, and school-parent relations. Special seminar arranged. Requires departmental recommendation and consent.
280:170(g). Human Relations - 3 hrs.
Examination of societal subgroup differences and the impact of sexism, racism, ageism, disabilities, prejudice, and discrimination in interpersonal relations. Emphasis on attitudes, skills, and techniques for creating favorable learning experiences for students. Reserved for graduate students and practicing teachers. Prerequisite: junior standing. (Offered Fall, Spring, and Summer)
280:191(g). Supervision of Student Teaching - 3 hrs.
Designed primarily for those presently or potentially involved in the supervision of student teachers. Includes the selection and preparation of student teachers; readiness for student teaching; principles of supervision, including the identification and analysis of good classroom procedures and desirable experiences for the student teacher in the total school program; professional responsibilities of the student teacher in the school and community; evaluation of student teachers, and the supervising teacher's role in the selection of teachers for the profession. Also includes the selection and preparation of student teaching centers, qualifications of supervising teachers, and the role of the coordinator of student teaching. Prerequisite: junior standing. (Variable)

## 280:250. Advanced Laboratory Practice - 2-12 hrs.

Student may concentrate on any aspect of the school program, such as curriculum, methods, evaluation, remedial instruction, guidance, supervision, administration, public school relations, educational technology and audio-visual aids, and extra-class activities. Requires consent of the Head of Department of Teaching. (Offered Fall, Spring, and Summer)

## 290 Counseling

290:103(g). Introduction to Professional Counseling - 3 hrs .
Introduction to counseling in school ( $\mathrm{K}-12$ ), mental health and community agency settings. Emphasis on professional roles, current trends, and legal/ethical issues. Prerequisite: junior standing; consent of department head. (Offered Fall and Spring)

## 290:105(g). Counseling Skills - 3 hrs.

Focus on developing counseling skills with emphasis on self-understanding. Verbal and non-verbal counseling skills are developed through lecture, demonstration, and extensive laboratory practice. Prerequisites: junior standing; consent of department head. (Offered Fall and Spring)
290:198. Independent Study.
(Variable)
290:204. Introduction to Play Therapy - 3 hrs.
Introduces counseling students to the theories and methods of using play techniques for counseling and assessing children and adolescents; emphasis on supervised play therapy experience. Prerequisites: 290:105; 290:254; consent of department head. (Variable)
290:205. Counseling Processes with Individuals and Systems - 3 hrs. Develops advanced-level counseling skills necessary for clinical practice in mental health settings. Focus on case conceptualization and specific
interventions for initiating, sustaining, and terminating a counseling experience. Extensive skill practice/lab. Prerequisites: 290:103; 290:105; 290: 224; consent of department head. Corequisite: 290:227. (Offered Fall or Spring)
290:210. Developing Comprehensive School Counseling Programs -
3 hrs.
Focus on managing, organizing, and designing K-12 comprehensive, sequential, developmental guidance programs. Prerequisites: School Counseling major; 290:103; 290:105; consent of department head. (Offered Summer)

## 290:220. Group Process - 3 hrs.

Emphasis on developing group leadership skills for school and mental health counselors, including integration of theory and practice. Prerequisite: 290:224; consent of department head. (Offered Fall and Spring)
290:224. Applied Group Dynamics - 3 hrs.
Laboratory learning emphasizing the concepts and skills necessary for effective group membership, including group development theory and conditions for personal and interpersonal learning in group settings. Prerequisite: consent of department head. (Offered Fall and Spring)
290:225. Facilitating Career Development - 3 hrs.
Exploration of career development theory and career counseling techniques. Emphasis on significance of occupational choice; examination of sociological, psychological, and economic factors. Prerequisites: 290:103; 290:105; consent of department head. (Offered Fall and Summer) 290:226. Consultation Skills - 3 hrs.
Principles, procedures, and process of consultation with emphasis on developing consultation skills. Prerequisites: 290:103; 290:105; 290:224; 290:205 or 290:254 (highly recommended); consent of department head. (Offered Spring and Summer)

## 290:227. Counseling Theory - 3 hrs.

Overview of predominant counseling theories with practical applications. Prerequisites: 290:103 and/or 290:105 as corequisite; consent of department head. (Offered Summer and Fall)

## 290:228. Assessment Techniques in Counseling - 3 hrs.

Assessment and appraisal procedures of individuals and groups. Primary focus on the understanding and use of standardized and non-standardized tests, inventories, observations, and case data for diagnosis in counseling. Prerequisites: 290:103; 290:105; 290:205 (highly recommended); consent of department head. (Offered Fall or Spring, and Summer)

## 290:240. Intervention Strategies - 3 hrs.

Integration of counseling theory and counseling process in the design and implementation of strategies for resolving client problems. Preréquisites: 290:205 or 290:254; 290:227; consent of department head. (Variable)
290:241. Treatment Procedures in Mental Health Counseling - 3 hrs.
Emphasis on the diagnosis of psychopathology and corresponding treatment procedures. Includes etiology, diagnosis, and treatment of mental and emotional disorders and dysfunctional behavior. Prerequisites: 290:103; 290:105; 290:205; 290:224; 290:227; 290:228 (highly recommended); 400: 142; consent of department head. (Offered Spring or Summer)

## 290:245. Advanced Treatment Procedures in Mental Health Counseling

 -3 hrs .Continuation and extension of 290:241. Includes etiology, diagnosis, and treatment planning for a variety of mental disorders not covered in 290:241, with emphasis on case management and treatment plan documentation. Prerequisites: 290:241; consent of department head. (Variable)

## 290:250. Family Counseling - 3 hrs .

Emphasis on a family systems perspective. Includes theoretical foundations, family developmental life cycles, identification of functional/ dysfunctional family systems, survey of interventions and general process of family counseling. Prerequisites: 290:103; 290:105; 290:227 (highly recommended); consent of department head. (Offered Fall or Spring, and Summer)

## 290:254. Counseling Children and Adolescents - 3 hrs.

Normal and abnormal child/adolescent development, problem conceptualization from an individual as well as a systems-based perspective, and development of advanced-level counseling skills with emphasis on age-appropriate assessment and interventions. Lab practice and actual counseling experience with young clients. Prerequisites: 290:105; 290:227 (highly recommended); consent of department head. (Offered Fall)
290:256. Multicultural Counseling - 3 hrs.
Emphasizes examination of personal attitudes, perceptions, and behaviors regarding women, ethnic minorities, elderly, gays and lesbians, and persons with disabilities and concepts such as oppression. Increases understanding of counseling theories and techniques within a multicultural paradigm. Prerequisites: 290:103; 290:224; 290:227; consent of department head. (Offered Fall or Spring, and Summer)

## 290:260. Advanced Family Counseling - 3 hrs.

Emphasis on treatment procedures, the integration of theory and practice, and application of family counseling concepts in the work setting. Prerequisite: 290:250 or consent of instructor. (Variable)

## 290:262. Intervention and Prevention with Children, Adolescents, and

Parents - 3 hrs.
Emphasis on skill development in applying developmentally-appropriate prevention and intervention strategies with children and adolescents; addresses working with parents and "at-risk" youth. Lab practice and actual counseling experience with youth. Prerequisites: 290:105; 290:254; consent of department head. (Offered Spring)

## 290:285. Readings in Counseling - 1-3 hrs.

(Variable)
290:289. Seminar in Counseling —-4-3 hrs.
Special topics as indicated in the Schedule of Classes. (Variable)
290:290. Practicum in Counseling - 3 hrs.
First-level intensive experience designed to further develop individual and group counseling skills. Offered on credit/no credit basis only. Prerequisites for School Counseling: 290:103; 290:105; 290:220; 290:224; 290:227; 290:250 (recommended); 290:254; 290:262 (highly recommended); consent of department head. For Mental Health Counseling: 290:103; 290:105; 290:205; 290:220; 290:224; 290:227; 290:241 (recommended); 290:250 (recommended); 400:142; consent of department head. (Offered Fall and Spring)

## 290:291. Internship - 3-6 hrs.

Advanced intensive experience designed to integrate counseling and consultation skills in a work setting. Offered on credit/no credit basis only. Prerequisites for School Counseling: 290:262; 290:290; consent of department head. For Mental Health Counseling: 290:290; consent of department head. (Offered Fall and Spring)

## 290:299. Research.

(Variable)

## 300 Safety Education

300:130(g). Driver and Traffic Safety 1 - 3 hrs.
Classroom and practice driving units; safety education as a social problem; development of safety skills, habits, attitudes, and ideals; accident causes; study of research. Prerequisite: junior standing. (Variable - offered through Continuing Education and Special Programs)
300:131(g). Driver and Traffic Safety II - 3 hrs.
Classroom and in-the-car techniques of imparting instruction to high school students taking driver education. Prerequisite: junior standing. (Variable - offered through Continuing Education and Special Programs)
300:132(g). Directing the Safery Program - 2 hrs.
Organization and administration of safety programs through the entire school system. Prerequisite: junior standing. (Varíable - offered through Continuing Education and Special Programs)

300:140(g). Traffic Law Enforcement - 3 hrs .
Acquaints safety and driver education teachers with the purposes of traffic law enforcement and traffic engineering. Prerequisite: junic standing. (Variable - offered through Continuing Education and Specient Programs)

## 300:192(g). Experience in Safety Education - 2-4 hrs.

Offered in various specialized fields; may be repeated once for credit in a different area. Maximum of 8 hours credit. Prerequisite: junior stand ing. (Variable - offered through Continuing Education and Special Programs)

## 310 Design, Family and Consumer Sciences

310:030. Basic Nutrition - 2 hrs.
Study of nutrition in relation to growth development and maintenand of the body. No credit for 310:030 if credit previously earned in 310:03 2 㘳 (Variable)
310:031. Nutrition for Early Childhood Education - 2 hrs.
Study of the role of nutrition in the growth and development of young children, and the effect of nutrition on learning processes. Focus on nutritional needs of young children as well as the incorporation of nutritioy education into the curriculum in early childhood education. Early Childhood Education majors only. (Variable)
310:032. Fundamentals of Nutrition - 2-3 hrs.
Needs and functions of food nutrients for growth and maintenance of health through the life cycle. No credit for 310:032 if credit previousy earned in 310:030. Prerequisite: 420:050 or 860:044 or 860:061 or equiva, lent or consent of instructor. (Variable)
310:106. Professional Development: Dietetics - 1 hr .
Laws, regulations, standards in dietetic practice; professional ethics and responsibilities; functioning in diverse cultural/socioeconomic settings, and fundamentals of political and legislative processes as they affect the profession and practice of design, family and consumer sciences and dietetics. Prerequisite: junior standing. (Variable)
310:130(g). Nutrition During the Life Cycle - 3 hrs.
Human nutritional needs; nutrient requirements of women during the reproductive period; problems in feeding infants and children; indices of growth and development; and geriatric nutritional problems. Prerequit sites: 310:030 or 310:032; junior standing. (Variable)
310:139(g). Seminar: Nutrition and Food Science - 1 hr .
Review of scientific literature on specific topics in food science and/or nutrition; oral and written reports presented. Prerequisite: junior standing. (Variable)
310:148. Problems in Nutrition and Food Science - 1-4 hrs.
(1) Food Science; (2) Nutrition. Prerequisites for Nutrition section: junior standing; consent of instructor. (Variable)
310:149(g). Nutrition in Disease - 4 hrs.
Role of nutrition in the prevention and treatment of disease. Pathology of and biological basis for nutritional, medical, and drug therapy of selected diseases. Counseling and interviewing techniques, teaching strategies and their application in practice. Prerequisites: 310:130; 840:102; junior standing. Prerequisite or corequisite: 860:154. (Variable)
310:199. Study Tour - 2-3 hrs.
(Variable)
310:288. Problems in Design, Family and Consumer Sciences - 1-4 hrs. Various areas according to students' needs: (1) Human Development and Family Life; (2) Nutrition and Food Science; (3) Textile and Apparel; (4) Interior Design; (5) Management and Consumer Education. (Variable)

## 31F (Family Services/Family Studies) <br> 31F:010. Human Identity and Relationships - 3 hrs.

Use of social science theory and research to understand psycho-sociocultural influences in the development of identity and interpersonal relationships. Emphasizes application of current research and theory to facilitate positive individual growth and committed intimate relationships. (Formerly 310:053) (Offered Fall and Spring)
31F:020. Family Relationships - 3 hrs .
Understanding contemporary families as they exist in their cultural context. Exploration of how families change and adapt to normative and non-normative challenges. Application of family theory and current research in order to understand family dynamics. (Formerly 310:052) (Offered Fall and Spring)
31F:050. Research Methods in Family Science - 3 hrs.
Introduction to basic research methods used in family science. Quantitative and qualitative research designs, ethical considerations, and evaluating research results. Development of hypotheses based on current research, choosing appropriate methodologies to address them. (Formerly 310:051) (Offered Fall and Spring)
31F:054. Decision Making in Family Systoms - 3 hrs.
Decision-making processes in family system; analysis of resource allocation and decision making regarding behavioral, economic, and relationship issues internal and external to the family. Prerequisite: 31F:020. (Formerly 310:054) (Variable)
31F:055. Human Growth and Development - 3 hrs.
Examination of theory and research contributing to our understanding of how biological, psychological, and social influences shape interindividual differences and intraindividual change across the life span. Prerequisite: 400:001 or consent of instructor. (Formerly 310:055) (Offered Fall and Spring)
31F:057. Human Relationships and Sexuality - 3 hrs.
Human sexuality as an integration of biological, psychological, and social factors. Topics include developing healthy relationships, sexual orientation, love, sexuality education, sexual decision making, and challenges of sexual health and functioning. (Formerly 310:057) (Offered Fall and Spring)

## 31F:060. Strategies and Issues in Family Services - 3 hrs.

Survey of prevention and intervention models, methods and professional issues involved in family services. Prerequisites: 31F:020; 200:030 or 31F:055 or $400: 120$. (Formerly 310:056) (Offered Fall and Spring)
31F:077. Management of Family Resources - 3 hrs.
Exploration of the management of human and economic resources available to individuals and families through the lifespan from a family science perspective. Emphasis on financial, time, and work/family issues. Prerequisite: sophomore standing. (Formerly 310:070) (Offered Fall)
31F:130(g). Models and Methodology of Family Science - 3 hrs.
Exploration and integration of theoretical models and methodology utilized in family sciences. Prerequisites: 3 hours social science research methods; 12 hours in Family Services; junior standing. (Formerly 310:160g) (Variable)
31F:150(g). Family Perspectives in Adulthood and Aging - 3 hrs.
Examination of topics in aging families with an emphasis on theoretical perspectives related to the changing nature of relationships and daily life, and the contexts in which those changes occur. Highlights issues related to attitudes about aging, health, diversity, public policy, caregiving, and interventions. Prerequisites: 31F:020; 200:030 or 31F:055 or 400:120; junior standing. (Formerly 310:154g) (Offered Fall)

## 31F:153(g). Family Relationships in Crisis - 3 hrs.

Family dynamics in crisis situations; review and application of the theoretical and empirical research about the effects of stress and crises on individuals and families, including intervention and policy implications. Prerequisites: 31F:020; 3 hours social science research methods; junior
standing. (Formerly 310:153g) (Offered Fall and Spring) 31F:155(g). Parenting - 3 hrs.
Review of parent-child relationships and the dynamic processes of parenting children from conception through young adulthood. Emphasizes developmental and family theory and the diversity of contexts that impact parent-child relationships. Prerequisites: 31F:020; 200:030 or 31F:055 or 400:120; junior standing. (Formerly 310:155g) (Offered Fall and Spring)
31F:157(g). Family Life and Human Sexuality - 3 hrs.
Theoretical and empirical literature regarding sexuality within family contexts. Evaluation and development of program materials in pregnancy prevention, sexual abuse, decision making, sexual health, and sexuality education. Prerequisites: 31F:057; junior standing. (Formerly 310:152g) (Variable)

## 31F:162(g). Issues in Family Policy - 3 hrs .

Policy making process from a family perspective. Policies, consequences, alternatives, and roles family professionals can play in influencing policy at the local, state, and federal levels. Prerequisites: 31F:020; junior standing. (Formerly $310: 162 \mathrm{~g}$ ) (Variable)

## 31F:177(g). The American Consumer - 3 hrs.

Analytical approach to the consumption of durables, goods, services, and housing; developing competencies for consumer decisions and actions in a global economy. Prerequisite: junior standing. (Formerly 310:177g) (Variable; by correspondence every term)

## 31F:178(g). Family Life Education - 3 hrs.

Exploration of issues, materials, and methods in family life education; development of concepts and curricula for various age and special needs groups; qualifications of the family life educator. Prerequisites: 31F:020; 31F:057; 3 hours social science research methods; senior standing; Family Services majors only; consent of instructor. (Formerly 310:157g) (Offered Spring)

## 31F:180(g). Problems in Family Services - 1-4 hrs.

Individual topic areas of in-depth study. Prerequisites: junior standing; consent of instructor. (Formerly 310:194g, section 4) (Variable)

## 31F:182(g). Research in Family Services - 1-3 hrs.

Conduct supervised research and/or scholarly project. Prerequisites: research methods course; junior standing; consent of instructor. (Formerly 310:192g, section 4) (Variable)

## 31F:184(g). Topics in Family Services - 1-3 hrs.

Selected topics relating to current issues in Family Services. Topics to be announced in the Schedule of Classes. May be repeated for maximum of 6 hours but not on same topic. Prerequisite: junior standing. (Formerly 310:184g) (Variable)
31F:190. Professional Practice in Family Services - 3 hrs.
Professional development course including the following topics: family services as a profession; ethical decisions; diversity in the professional field; issues that emerge in family service agencies; and preparation for internship and entry into employment. Prerequisites: 31F:060; Family Services majors only; consent of instructor. (Formerly 310:156) (Offered Fall and Spring)
31F:191(g). Advanced Research Methods in Family Science - 3 hrs.
Evaluation of current research in family services and development of research proposals. Prerequisites: introductory statistics course or consent of instructor; junior standing. (Formerly 310:191g, section 4) (Variable)

## 31F:195. Internship in Family Services - 9 hrs.

Supervised experience in approved practicum situation. Transfer students must complete one full semester in residence before being approved for internship. Prerequisites: Stipulate a minimum of 400 hours of internship plus seminar; 31F:190; senior standing. (Formerly 310:195, section 4) (Offered Fall, Spring, and Summer)
31F:198. Independent Study in Family Services.
(Formerly 310:198) (Variable)

## 31G (Gerontology)

## 31G:184(g). Topics in Gerontoloy - 1-3 hrs.

Selected topics relating to current issues in gerontology. Topics to be announced in the Schedule of Classes. May be repeated for maximum of 6 hours but not on same topic. Prerequisite: junior standing. (Formerly 310:184g) (Variable)
31G:191(g). Research Methods in Gerontology - 3 hrs.
Evaluation of current research in gerontology and development of research proposals. Prerequisites: introductory statistics course or consent of instructor; junior standing. (Formerly 310:191g) (Variable)
31G:192(g). Research in Gerontology - 1-3 hrs.
Conduct supervised research and/or scholarly project. Prerequisites: research methods course; junior standing; consent of instructor. (Formerly 310:192g) (Variable)
31G:193. Internship Seminar - 1 hr.
Process seminar to focus on and maximize student learning from their internship experiences and aid in their development of professional practices. May be repeated for maximum of 2 hours. Corequisite: 31G:195 or 410:168 or 980:184. (Same as 410:193 and 980:193) (Formerly 310:193) (Offered Fall, Spring, and Summer)
31G:194(g). Problems in Gerontology - $\mathbf{1 - 4}$ hrs.
Individual topic areas of in-depth study. Prerequisites: junior standing; consent of instructor. (Formerly 310:194g) (Variable)

## 31G:195. Internship in Gerontology

Supervised experience in approved work situation. Transfer students must complete one full semester in residence before being approved for internship. (Formerly 310:195, section 2 and section 5) (Offered Fall, Spring, and Summer)

Sec. 1. Social Sciences track - 3 hrs. Prerequisite or corequisite: 31G:193 (Offered Summer)
Sec. 2. Long Term Care track - 1-12 hrs. May be repeated for maximum of 12 hours. Corequisite: $31 \mathrm{G}: 193$.

## 31G:198. Independent Study in Gerontology.

(Formerly 310:198) (Variable)

## 311 (Interior Design)

31::061. Design Foundations - 3 hrs .
Introduction to design elements and principles and their application to applied and fine arts. Attention to materials techniques and evaluation. Development of individual perception of design processes within interior design context. (Formerly 310:061) (Offered Fall and Spring)

## 311:063. Dratting I-3 hrs.

Introduction to architectural drafting; emphasis on drawing as a visual communication medium in the field of interior design. Development of drafting skills as a graphic language. Prerequisite or corequisite: 311:061. (Formerly 310:063) (Offered Fall)

## 31::064. Drafting II -3 hrs.

Emphasis on three-dimensional graphic representation in the field of interior design. Includes introduction to the computer. Prerequisite: 311:063. Prerequisite or corequisite: 311:066; 311:125; declared Interior Design majors only. (Formerly 310:064) (Offered Spring)
311:065. Introduction to Interior Design - 3 hrs.
Survey of the social, functional, and aesthetic aspects of choosing and furnishing a residential environment. No credit for Interior Design majors if taken after 311:063. (Formerly 310:065) (Variable)
31:066. Design I -4 hrs.
Design and presentation skills developed through studio experiences in various media. Emphasis on perceptual and conceptual development in two and three dimensions. Prerequisite or corequisite: 311:064; 311:125; declared Interior Design majors only. (Formerly 310:066) (Offered Spring)
31::067. History of Interiors I-3 hrs.
Styles of furnishings, interiors, and architecture from antiquity to the
mid-19th century. (Formerly 310:067) (Offered Fall)
311:068. History of Interiors II - 3 hrs.
Styles of furnishings, interiors, and architecture from the mid-19th century to the present and their use in homes; current trends and designerd. Prerequisite: 311:067. (Formerly 310:068) (Offered Spring)
311:075. Computer Applications for Interior Design - 3 hrs.
Advanced computer-aided design using AutoCAD and other related software in the field of interior design. Prerequisite: 311:064. (Formerly 310:075) (Offered Fall)
31: $: 125$. Design II - 4 hrs.
Interior design materials, structural components, building and mechanical systems, and lighting design. Prerequisite or corequisite: 311:064 31I:066; declared Interior Design majors only. (Formerly 310:125) (Of fered Spring)
311:126. Design III - 4 hrs.
Residential design. Programming, space planning, life safety issues conceptualization, problem solving, and presentation. Includes specien populations and purposes. Prerequisite: 31I:125. Corequisite: 31I:129 (Formerly 310:126) (Offered Fall)

## 31::127. Design IV - 4 hrs.

Non-residential. Programming, space planning, life safety issues, concep, tualization, problem solving, and presentation. Includes special popula tions and purposes. Prerequisite: 311:126. (Formerly 310:127) (Offered Spring)

## 31::128. Design V-4 hrs.

Complex residential/non-residential design problems incorporating applied research methods. Prerequisite: 311:127. (Formerly 310:128) (Offered Fall)

## 311:129. Interior Design Standards - 2 hrs.

Standards set by the profession for entry-level positions in Interior Design. Corequisite: 311:126. (Formerly 310:129) (Offered Fall)

## 31:164. Professional Practice of Interior Design - 3 hrs.

Profession and practice of Interior Design. Development of credentials and portfolio for job market entry. Prerequisite or corequisite: 31I:128, (Formerly 310:164) (Offered Fall)
311:184(g). Topics in Interiar Design - $\mathbf{1 - 3} \mathbf{~ h r s . ~}$
Selected topics relating to current issues in Interior Design. Topics to be announced in the Schedule of Classes. May be repeated for maximum of 6 hours but not on same topic. Prerequisite: junior standing. (Formerly) $310: 184 \mathrm{~g}$ ) (Variable)

## 311:191(g). Research Methods in Interior Design - 3 hrs.

Evaluation of current research in interior design and development of research proposals. Prerequisites: introductory statistics course or consent of instructor; junior standing. (Formerly 310:191g, section 3) (Variable)
311:192(g). Research in Interior Design - 1-3 hrs.
Conduct supervised research and/or scholarly project. Prerequisites: research methods course; junior standing; consent of instructor. (Formerly) 310:192g, section 3) (Variable)

## 31:194(g). Problems in Interior Design — 1-4 hrs.

Individual topic areas of in-depth study. Prerequisites: junior standing; consent of instructor. (Formerly 310:194g, section 3) (Variable)

## 31:195. Internship in Interior Design - 4 hrs.

Supervised experience in approved work situation. Transfer students must complete one full semester in residence before being approved for internship. Prerequisite: all course work must be completed. (Formerly 310:195, section 3) (Offered Fall, Spring, and Summer)
31:198. Independent Study in Interior Design.
(Formerly 310:198) (Variable)

## 31T (Textile and Apparel)

31T:011. Computer Textile and Apparel Design Foundations - 3 hrs.
Use of computer technology to investigate the elements and principles of design as they apply to textiles and apparel. (Formerly 310:011) (Offered Fall)

## 31T:012. Creative Textile and Apparel Design Foundations - 3 hrs.

Investigation of elements and principles of design as they apply to textiles and apparel. (Formerly 310:012) (Variable)
31T:013. Introduction to Textile Materials - $\mathbf{3}$ hrs.
Fundamentals of textiles as related to the production, sale, and use of apparel, interiors, and other products. Laboratory experiences related to the identification of fibers, yarns, and fabrics. (Formerly 310:013) (Offered Fall, Spring, and Summer)
31T:014. Apparel Evaluation - 3 hrs.
Application and analysis of methods and techniques used to assemble apparel and evaluate ready-to-wear quality. Prerequisite: 31T:013. (Formerly 310:014) (Offered Spring)
31T:015. Multicultural Aspects of Apparel Design - 3 hrs.
Cultural, aesthetic, and technical aspects of apparel design and assembly from a multicultural perspective. (Formerly 310:015) (Variable)
31T:020. Intreduction to the Textile and Apparel Industry - 3 hrs.
Overview of the structure of the textile and apparel industry. (Formerly 310:020) (Offered Fall and Spring)
31T:100. Computer Applications for the Textile and Apparel Industry 3 hrs.
Industry-based software, U4ia (Euphoria), applied to the areas of product development, sourcing, manufacturing, marketing, advertising, sales, and retailing. Software uses raster, vector, and texture-mapping tools. Prerequisites: 150:080 (for business minors) or 810:021 (for non-business minors). (Formerly 310:100) (Offered Spring)

## 31T:114(g). Socio-Psychological Aspects of Textiles and Apparel 3 hrs.

Textiles and apparel in relation to culture, society, and the individual. Survey and application of selected theories. Prerequisite: junior standing. (Formerly 310:114g) (Offered Spring)
31T:115(g). Apparel Buying and Merchandising - 3 hrs.
Application of merchandising concepts and procedures for planning, developing, sourcing, and presenting apparel product lines for identified target markets with regard to pricing, assorting, styling, and timing. Prerequisite: junior standing. (Formerly 310:115g) (Offered Fall)
31T:116. History of Costume - 3 hrs.
Costume in the western world from ancient times to the present. (Formerly 310:116) (Offered Fall)
31T:119. Fashion Trend Analysis - 3 hrs.
Analysis of contemporary fashion trends using select theory and forecasting models. Prerequisite: 31T:020. (Formerly 310:119) (Variable)
31T:121. Fashion Promotion - 3 hrs.
Promotion and nonpersonal selling activities within the fashion marketing process. Includes strategies, media selection and use, planning and budgetary processes, publicity, display, special events, and fashion shows. (Formerly 310:121) (Offered Spring)
31T:122. Product Development and Planning - 3 hrs.
Emphasis on technical aspects of the product development process including creating the pattern by apparel design methods of flat pattern, draping, and drafting; pattern grading; sourcing materials; costing; and production planning. Prerequisite: 31T:014. (Formerly 310:122) (Offered Fall)

## 31T:123. Textile Structures - 3 hrs .

Structural and functional aspects of textile yarns and fabrics. Manufacturing techniques are related to physical properties of yarns and fabrics used in apparel and other end uses, with a focus on textile and apparel product development. Prerequisite: 31T:013. (Formerly 310:123) (Offered

## Spring)

31T:124. Quality Assurance for Textile Materials - 3 hrs.
Focus on quality issues for textile materials used in apparel and other end uses. Discussion of quality theory, as well as textile material performance expectations and methods of predicting performance through physical testing. Prerequisite: 31T:013. (Formerly 310:124) (Offered Fall)
31T:184(g). Topics in Textile and Apparel - 1-3 hrs.
Selected topics relating to current issues in Textile and Apparel. Topics to be announced in the Schedule of Classes. May be repeated for maximum of 6 hours but not on same topic. Prerequisite: junior standing. (Formerly $310: 184 \mathrm{~g}$ ) (Variable)
31T:185. Professional Development: Textile and Apparel - 2 hrs.
Serves as the program capstone experience. Students study leadership skills, professional ethics, as well as prepare an internship experience. Course culminates with a large-scale group experiential learning project conducted in the field. Prerequisites: 31T:014; 31T:115; 31T:121. (Formerly 310:185) (Offered Fall)
31T:191(g). Research Methods in Textiles and Apparel - 3 hrs .
Evaluation of current research in textiles and apparel and development of research proposals. Prerequisites: introductory statistics course or consent of instructor; junior standing. (Formerly 310:191g section 1) (Variable)

## 31T:192(g). Research in Design, Family and Consumer Sciences -

1-3 hrs.
Conduct supervised research and/or scholarly project. Prerequisites: research methods course; junior standing; consent of instructor. (Formerly 310:192g, section 1) (Variable)

## 31T:194(g). Problems in Design, Family and Consumer Sciences -

 $1-4$ hrs.Individual topic areas of in-depth study. Prerequisites: junior standing; consent of instructor. (Formerly 310:194g, section 1) (Variable)
31T:195. Internship in Textile and Apparel - 4 hrs.
Supervised experience in approved work situation. Transfer students must complete one full semester in residence before being approved for internship. Prerequisites: 31T:011; 31T:012; 31T:013; 31T:014; 31T:020; 31T:100. (Formerly 310:195, section 1) (Offered Summer)
31T:198. Independent Study in Textiles and Apparel.
(Formerly 310:198) (Variable)

## 330 Industrial Technology

330:008. Manufacturing Materials and Processes - Metals - 2 hrs.
Survey of manufacturing materials, processes, and tooling used to form, separate, fabricate, condition, and finish ferrous and non-ferrous products. Lecture and lab activities cover casting, machining, adhesive and cohesive joining, precision measurement, lab safety and process quality. (Offered Fall and Spring)
330:009. Manufacturing Materials and Processes - Non-Metals 2 hrs.
Survey of manufacturing materials, processes, and tooling used to form, separate, fabricate, condition, and finish polymer, ceramic, composite, and/or wood products. Lecture and lab activities cover forming, molding, machining, fabrication, joining, surface treatment, lab safety and process quality. (Offered Fall and Spring)
330:014. Machining Principles - 3 hrs.
Introduction to machining processes including setup and operation of lathes, mills, and grinders; tool geometry, tool selection, blueprint reading, precision measurement, gauges, and inspection. Lecture and lab. Prerequisites: 330:008; 330:009. (Offered Spring)
330:017. Computer-Aided Design and Drafting - 3 hrs.
Fundamental concepts and procedures of producing graphics applicable to design and/or drafting in such areas as art, architecture, cartography, communications, electronics, manufacturing, and interior planning. Lab
activities using CAD software on microcomputer systems. (Offered Fall and Spring)
330:018. Construction Resources - 3 hrs.
Examination of the resources commonly utilized in the construction industry-money, materials, methods, processes, personnel-and their management. (Offered Fall and Spring)
330:019. Introduction to Technology Education - 3 hrs.
Evolution and contemporary approaches in technology education and related fields. Exploration of career goals. (Offered Fall and Spring)
330:020. Communication Systems - 3 hrs.
Industrial communications techniques, tools, and management strategies associated with design and delivery of messages in organizations. (Offered Fall and Spring)
330:022. Communication Technology - 4 hrs.
Survey of the tools, materials, and processes used for the production and reproduction of visual images and multimedia. Encompasses technical drawing, printing/publishing, multimedia, and Internet technology. (Offered Fall and Spring)
330:024. Technical Drawing and Design - 3-4 hrs.
Fundamentals of the engineering design process including descriptive geometry, geometric construction, multiview projection, fits and tolerances, and applications. Discussion and applications, 4 periods; design lab, 2 periods. May be taken without design lab for 3 credit hours. Prerequisite: 330:017 or equivalent. (Offered Fall and Spring)
330:025. Construction Graphics - 3 hrs.
Analysis of the techniques utilized in the designing and developing of specifications and working drawings for commercial construction. Prerequisite or corequisite: 330:018, (Offered Spring)
330:027. Construction Materials - $\mathbf{3}$ hrs.
Materials of construction; their properties, manufacture, characteristics, and application. Prerequisite: 800:060. Corequisite: 330:018. (Offered Fall)

## 330:033. Construction Surveying - 3 hrs.

Land, topographic, power, pipeline, highway, and municipal surveying. Analysis of coordinate geometry, transverse computation, horizontal, vertical, and spiral curve design and layout. Prerequisite: 800:060. (Offered Fall)

## 330:036. Power Technology - 3 hrs.

Introduction to energy and mechanical power systems. Lecture and lab cover traditional and emerging electrical power technologies such as renewable energy applications. (Offered Fall)
330:037. Introduction to Circuits - $\mathbf{3} \mathbf{h r s}$.
Introduction to AC circuits, in-depth DC circuits; current and voltage laws, circuit analysis including series and parallel circuits, inductance, capacitance, introductory magnetism; power calculations and electrical measurements, circuit simulation, troubleshooting techniques. Prerequisites: 800:046 or equivalent or consent of instructor. (Offered Fall)
330:038. Introduction to Electrical Power and Machinery - 3 hrs.
Single and polyphase circuits, $D C$ machines, $A C$ single and polyphase synchronous and induction machines, power transformers, introduction to conventional- and renewable-based power systems. Includes lecture and lab projects. Prerequisites: 330:037; 330:039 or consent of instructor.
(Offered Spring)

## 330:039. Circuits and Systems - 3 hrs.

AC circuits including j operators, phasors, transformers, reactance, capacitance, impedance, AC resonance, frequency response, passive filters, network theorems and circuit simulation. Lecture and lab. Prerequisites: 330:037; 800:060. (Formerly 330:139) (Offered Spring)
330:040. Fundamentals of Mstal Casting Engineering Technology 2 hrs.
Introduction to foundry technologies and careers; evolution, systems, research and development, and planning/control of foundry production;
evaluation of all aspects of foundry operations including melting, molder ing, casting quality, and supervision. (Offered Fall)
330:041. Introduction to Analog Electronics - 3 hrs.
Semiconductor materials, P-N junction, characteristics of electronil devices: junction diodes, photodiodes, LED, Zener diodes, and their applications, BJT and FET transistors, small-signal amplifiers, oscillatox electronic circuit simulation and troubleshooting. Prerequisites or coreq; uisites: 330:037; 330:039. (Offered Fall)
330:042. Introduction to Digital Electronics - 3 hrs.
Number systems and codes, digital arithmetic, Boolean algebra, elemen tary logic gates, combinational logic circuits, sequential logic circuit logic circuit design and industrial applications, simulation and troubled shooting. Lecture and lab. Prerequisites: 330:037; 330:039. (Offered Fall) 330:045. Construction Law and Documentation - 3 hrs.
Examination of construction contract principles, construction docuad ments, and the component parts of law affecting construction operation Prerequisite: 330:025. (Offered Fall)

## 330:055. Graphic Arts Technology - 4 hrs.

Concepts and practices of graphic communications including lithographic, screen, gravure, and relief-printing processes. Publication design/layout, image assembly, image transfer, finishing, and bindin, Prerequisite: 330:022 or consent of instructor. (Offered Fall)
330:060. Fundamentals of Automated Manufacturing - 3 hrs.
Flexible and fixed automation systems: transfer lines, CNC programy ming, robotics, and FMSs. (Offered Fall and Spring)
330:065. The World of Technology - 3-4 hrs.
Exploration of technologies affecting society, people, and careers; analysi of technologies in terms of costs, benefits, skills and knowledge required and options for participation as contributor, consumer, and citizen; communication, transportation, medical, agricultural, energy, and/or work-1 place systems. Discussion, 3 periods; lab, 2 periods. May be taken withoul lab for 3 credit hours. (Offered Fall and Spring)
330:070. Desktop Composition - 3 hrs.
Design and layout of publications by computer; including typogray phy, graphics, color, system configurations and industrial application (Offered Fall and Spring)
330:100. Undergraduate Research in Construction Management - $\mathbf{3}$ hrs. Senior group research project pertaining to a topic in construction. Includes an oral and written presentation of the findings, conclusions, and recommendations. Prerequisite: $330: 154$. (Offered Spring)

## 330:101(g). History and Philosophy of Career and Technical Education

 -2 hrs.Philosophy and historical development, principles, practices, and organis zation of public career and technical and adult education in the nations Prerequisite: junior standing. (Variable)
330:102. Graphic Communications Seminar - 1 hr .
Study of contemporary graphic communications issues not available in other technical and professional courses in the Graphic Communications major and minor. May be repeated once. Prerequisites: 330:020; 330:022 330:055; 330:070; junior standing. (Variable)
330:103. Analog Communications - 3 hrs.
Active filters, noise in electronic devices and circuits, basic communi-1 cation concepts including propagation, modulation, demodulation, AM/FM, SSB Communication systems, receivers, transmitters, antennas and transmission lines. Lecture and lab. Prerequisites: 330:152; 800:060; 800:061. (Offered Fall)
330:104. Digital and Data Communications - 3 hrs.
Digital and data communication techniques - digital radio, digital transmission, and coding, baseband communication, pulse modulation PWM, PPM, PAM and PCM, networking concepts including LAN, WAN, Ethernet, ATM, etc., introduction to fiber-optic and satellite communications. Prerequisites: 330:103; 330:156. (Offered Spring)

330:106(g). Geometric Dimensioning and Tolerancing - 2 hrs.
Geometric conformance and tolerancing theory and application pertaining to ANSI Y14.5M-1944. Prerequisite: junior standing. (Variable)
330:112 Industrial Projects I - 1 hr.
Cross-disciplinary teams work to research and develop a project with industrial partners. Conception phase includes problem identification, product development and testing, cost analysis, and/or process planning. First semester culminates in project proposal. Must register for 330:197 in spring semester. Prerequisites: senior standing; 12 semester hours completed in major concentration or consent of instructor. (Offered Fall) 330:113(g). Manufacturing Tooling - 3 hrs.
Principles of cutting tools, jigs, fixtures, progressive dies, and gaging; tool geometry, tool life, cost analysis, ergonomics, and safety in tooling design applications. Lecture and lab. Prerequisites: 330:008; 330:009; 330:017; 330:024; 330:170 or 330:172; junior standing. (Offered Spring)

## 330:114. Manufacturing Enterprise - 3 hrs.

Application of organizational and production management practices within a simulated manufacturing enterprise. Activities relate to enterprise functions of financing, designing, manufacturing, and marketing a product. Includes machine operation, maintenance, and safety. Prerequisites: 330:008; 330:009; 330:017 or 330:022 or 330:024; junior standing. (Variable)
330:119(g). Computer Applications in Industrial Technology - 3 hrs.
Review and evaluation of selected software relative to Industrial Technology. Proficiency in computer applications, electronic communications, web-based resources and industrial applications for computers for specific disciplines. Prerequisite: junior standing. (Variable)
330:120. Technology Education Curriculum Planning - $\mathbf{3}$ hrs.
Development of programs and courses for technology education and related fields, including content decision-making, delivery strategies, and program evaluation. Prerequisites: 330:019; junior standing. (Offered Fall)

## 330:121(g). Manufacturing Technology Systems - 3 hrs.

Applications and analysis of manufacturing systems, including equipment operation, maintenance, and safety. P'rerequisites: 330:008; 330:009; 330:017 or 330:022 or 330:024; junior standing. (Variable) 330:122(g). Advanced CAD and Modeling - 3 hrs.
Design and development of three-dimensional models, productivity techniques, system customization, and translation of graphic databases using a parametric, solid modeling system. Lecture and lab. Prerequisites: 330:008 or $330: 009 ; 330: 017 ; 330: 024$; junior standing. (Variable) 330:124. Mechanical Systems in Construction - $\mathbf{3}$ hrs.
Basic principles, methods, and equipment pertaining to building mechanical systems (heating, cooling, ventilation, and plumbing) related to human health and comfort. Prerequisite: 330:045. (Offered Fall)
330:125. Commercial and Heavy/Highway Construction - 3 hrs.
Examination of systems and operational procedures used to construct commercial, heavy and highway projects. Prerequisites: 120:030; 330:027. (Offered Spring)

## 330:128. Electrical Construction Materials and Methods - 3 hrs.

Basic principles of electricity and materials. Methods of electrical system designs in building construction. Prerequisite: 330;045. (Offered Spring)
330:129. Linear Control Systems - 3 hrs.
Learning open and closed loop control theory, applications to analogies for modeling and design procedures. Introducing sensors, actuators, PID control, analog controllers, and elementary concepts of dynamic performance and stability. Lecture and lab. Prerequisites: 330:037; 330:041; 330:042; 800:060; 880:054 or 880:130; or consent of instructor; junior standing. (Offered Fall)

## 330:132(g). Applied Metallurgy - 3 hrs.

Basic principles of metallurgy, structure, heat treatment, testing and inspection of metals and alloys used in manufacturing. Lecture and lab.

Prerequisites: $330: 008 ; 860: 020$ or $860: 044$; junior standing. (Offered Fall)
330:134(g). Molding Practices in Metal Casting - 3 hrs.
Study of molding practices used in contemporary metal casting. Prerequisites: 330:008; 330:040; junior standing. (Variable)

## 330:135(g). Design for Manufacturing - 3 hrs.

Applied manufacturing design process: design teams define, plan and document design project. Concept generation and evaluation, engineering and product performance specifications, costing, production process, and product support. Prerequisites: 330:017; 330:024; $330: 106 ; 330: 113$; 330:148; 330:170; 330:172; 800:060; junior standing. (Offered Spring) 330:136(g). Melting Practices in Metal Casting - 3 hrs.
Advanced course in the principles of metal melting systems including selection of furnace types, charge materials, refractory lining applications, energy recovery, and environmental considerations. Prerequisites: 330:040; 330:132; junior standing. (Variable)

## 330:137(g). Tooling Practices in Metal Casting - 3 hrs.

Advanced course in the principles of foundry tooling design including selection of pattern materials, rapid prototype development techniques, advanced polymer materials, and design of permanent mold tooling, as well as basic core box production techniques. Prerequisites: 330:040; 330:134; junior standing. (Variable)

## 330:141(g). Foundry Research Practicum - 3 hrs.

Advanced course in foundry operations involving the UNI-MCC foundry in a production mode. Development of a casting, construction of tooling, prototype casting, and production casting run with integration of foundry quality, and supervision. Prerequisites: 330:134; 330:136; 330:137; junior standing. (Variable)
330:142(g). Statistical Quality Control - 3 hrs.
Application of quality concepts to manufacturing environment using statistics, sampling techniques, probability, and control charts. Calculation and interpretation of process capability, design of experiments, and continuous improvement. Prerequisites: 330:008 or 330:009; 800:072; junior standing. (Offered Fall and Spring)
330:143(g). Managing Manufacturing Systems — 3 hrs.
Manufacturing functions related to forecasting, project planning, operations cost analysis, plant layout, process planning and control, supply chain management, lean manufacturing, and quality control. Prerequisites: 800:072 or 800:172; junior standing. (Offered Fall and Spring)
330:144(g). Web Publishing - 3 hrs.
Development of interactive web applications; identification of targeted audience, Web site management, layout, and maintenance. Prerequisites: 330:022; 330:070; junior standing. (Offered Fall)
330:145(g). Work Measurement and Improvement - 3 hrs.
Study of productivity improvement through work methods design, work measurement, methods analysis and development of manufacturing costs. Includes time study, methods improvement, demand flow, continuous improvement, and cost estimation. Prerequisites: 330:008; 330:009. Prerequisite or corequisite: 330:177; junior standing. (Variable)
330:146(g). Advanced Numerical Control Systems - 3 hrs.
Programming machining centers and turning centers: helical interpolation, polar coordinates and subroutines. Prerequisites: 330:017; 330:060; junior standing. (Variable)

## 330:147(g). Computer Aided Manufacturing - 3 hrs.

CAM application programs to create part geometry, tool paths, machining parameters, and post process NC code. Prerequisites: 330:146; junior standing. (Variable)
330:148(g). Machine Design - 3 hrs.
Principles of design for machine elements, failure analysis, clutches, brakes, dynamic loads, and balancing. Prerequisites: 330:008; 330:017; 330:170; junior standing. (Offered Fall)

## 330:149. Construction Estimating - 3 hrs.

Construction cost analysis techniques for estimating materials, labor, equipment, and subcontracting costs in commercial building construction. Prerequisite: $330: 124$. Corequisite: $330: 125$. (Offered Spring) 330:150(g). Screen Printing Technology - 3 hrs.
Screen preparation methods, two- and three-dimensional printing, and color register printing; emphasis on technical information and laboratory experiences. Prerequisites: 330:055; junior standing. (Offered Spring)
330:151(g). Computer Integrated Manufacturing - 3 hrs.
Fundamentals of product processes and operations, computers in manufacturing, computer-aided engineering, computer-aided production, integration of CAD/CAM technologies, computer-aided business, manufacturing systems integration of techniques and strategies. Prerequisites: 330:147 or consent of instructor; junior standing. (Variable)
330:152(g). Advanced Analog Electronics - 3 hrs .
Amplifier and oscillator circuits using discrete electronic devices, principle of feedback, ICs - SSI, MSI and LSI, operational amplifiers, electronic circuits using OP-AMPs, measurement and simulation techniques, regulated power supplies, industrial applications of ICs, troubleshooting techniques. Lecture and lab. Prerequisites: 330:041; 800:060; 880:054 or 880:130; junior standing. (Offered Spring)

## 330:153 (g). Construction Project Planning. Scheduling and Controlling

 -3 hrs .Further development of estimating expertise in previous courses with emphasis on planning, scheduling, and controlling of construction projects based on the use of CPM and Precedence Programming. Assessment of computer-aided scheduling and control systems. Prerequisites: 330:154; junior standing. (Offered,Spring)

## 330:154. Computerized Construction Estimating - 3 hrs.

Utilization of computer software and advanced estimating techniques. Prerequisite: 330:149. (Offered Fall)

## 330:155 (g). Finite Element Analysis - 3 hrs.

Fundamental concepts of the finite element method for linear stress and deformation analysis of mechanical components. Development of truss, beam, frame, plane stress, and plane strain elements. Practical modeling techniques and use of general-purpose codes for solving practical stress analysis problems. Prerequisites: $330: 170 ; 330: 172 ; 800: 060$; junior standing. (Variable)

## 330:156(g). Advanced Digital Electronics - 3 hrs .

Arithmetic circuits, sequential logic circuit analysis and synthesis, counters and registers, shift registers, memory devices, digital and analog interfaces, ADC, DAC, and Multiplexing. Introduction to microprocessor architecture. Lecture and lab. Prerequisites: 330:042 or 810:041; 800:060; 880:054 or 880:130; junior standing. (Offered Spring)
330:157(g). Real-Time Industrial Computing - 3 hrs.
Microcomputer technology applied to real-time industrial problems; survey of industrial computer hardware, networking, and software. Lecture and lab. Prerequisites: 330:152; 330:156; junior standing. (Offered Fall)
$330: 158(\mathrm{~g})$. Lithographic Technology - 3 hrs.
Practices in multiple color stripping and platemaking, and operation of lithographic, single-color presses. Includes, finishing and binding, flexography, and gravure are covered. Prerequisites: 330:022; 330:055; junior standing. (Offered Spring)
330:160 $(\mathrm{g})$. Computer-Aided Instrumentation and Interfacing - 3 hrs.
Computer-aided instrumentation and interfacing; real-time industrial data acquisition hardware and software; sensors, signal conditioning; design and debugging of data acquisition systems using software tools. Lecture and lab. Prerequisites: $330: 152 ; 330: 156 ; 330: 157$; junior standing. (Offered Spring)
330:161(g). Graphics Techniques - 3 hrs .
Study of the creation and conversion of graphics for print and crossmedia applications. Prerequisites: 330:055; 330:070; junior standing. (Offered Fall)

330:162(g). Applied Fluid Power - 3 hrs.
Basic fluid mechanics including pneumatics with emphasis on princip and applications to the fields of power, transportation, automation (pro) duction), and control. Practical mathematical problems and experime provide greater insight. Prerequisites: 330:036 or 880:054; junior stand ing. (Offered odd Falls)
330:163 $(\mathrm{g})$. Advanced Copy Preparation - 3 hrs.
Design, layout, and management of complex color publications. Prereuisites: 330:055; 330:070; junior standing. (Offered Spring)
330:164 (g). Programmable Logic Controllers (PLCs) - 3 hrs.
Introduction to PLCs, Basic Modes of Operation Ladder Logic Diagrani industrial applications, sequencers, bit-wise operations, arithmetic operations, and conditional branching. Lab activities and projects. Prerequisites: 330:037; 330:038; 330:041; 330:042; 810:030 or 810:036; junic standing. (Offered Fall)
330:166 (g). Advanced Electrical Power Systems - 3 hrs.
Analysis, modeling, simulation, and operation of electrical utility, commercial, and industrial power systems. Voltage-drop calculations, voltaci regulation, system protection, faults, and harmonics. Power quality in industrial power systems. Lecture and lab. Prerequisites: 330:037; 330:034, 330:039; 800:060; 880:054 or 880:130; junior standing. (Variable)

## 330:167. Industrial Applications of Power Electronics (IAPE) - 3 hrs.

Theory and application of high-power solid-state electronics for contrul and conversion of electrical poser devices. Single and 3-phase rectifien inverters, choppers, AC controllers, industrial applications. Prerequisite, $\mathbf{3 3 0 : 1 5 2}$ or consent of instructor; 880:054 or $\mathbf{8 8 0 : 1 3 0}$; junior standind (Offered Spring)
330:168(g). Technology Training Strategies - 3 hrs.
Developing training programs in technological environments, includ ing analysis and utilization of program planning models for businesd and industry, and specific strategies for customizing training for varioul groups within an organization, including synchronous and asynchronout delivery methods. Prerequisite: junior standing. (Variable)
330:169. Applied Photography - 3 hrs.
Photographic fundamentals including film and digital systems. Prerequ site: 330:022 or consent of instructor. (Offered Fall)
330:170. Statics and Strength of Materials - $\mathbf{3}$ hrs.
Evaluation of force and force resultants, and reporting of material chary acteristics and strength, and probable usefulness in the construction of structures. Prerequisites: $800: 046$ or $800: 048$ or $800: 060 ; 880: 054$; or consent of instructor. (Offered Fall)

## 330:171. Technical Work Experience - 2 hrs.

Supervised internship to gain practical occupational experience in the specialty area of approval. May be repeated once. Offered on credit/nd credit basis only. Prerequisite: 1000 clock hours of approved work experi, ence. (Variable)

## 330:172(g). Industrial Materials - 3 hrs.

Principles and properties of metals, ceramics, polymers, and composited Prerequisites: $330: 008 ; 330: 009 ; 860: 010$ or $860: 020$ or $860: 044$; or consent of instructor; junior standing. (Offered Fall and Spring)
330:173(g). Construction Management - 3 hrs .
Management concepts in construction: business methods, finance, deci $⿶ 凵$ sion making, labor relations, marketing, quality control, marketing and computer applications. Analysis of office and field problems. Prerequil sites: 330:154; junior standing. (Offered Spring)
330:174. Senior Design I-1 hr.
Individual and/or team analytical research or design project. Collaborat tion with local industry, government agencies, or research institutions is encouraged. Must register for 330:176 in spring semester. Prerequisitd senior in EIET major. (Offered Fall)
330:175. Structural Analysis in Construction - 3 hrs.
Structural analysis of wood, concrete, steel, and composite building syst
tems. Emphasis on topics such as the design of form work and scaffolding. Prerequisites: 330:170; junior standing. (Offered Fall)
330:176. Senior Design II - 3 hrs.
Development and completion of project identified in 330:174. Prerequisite: 330:174. (Offered Spring)
330:177(g). Advanced Manufacturing Processes - 3 hrs.
Advanced manufacturing processes in metals, polymers, composites, and ceramics. Prerequisites: 330;008; 330:009 or consent of instructor; junior standing. (Variable)
330:178(g). Contemporary Instruction in Technology Education - 3 hrs.
Inquiry into recent applications in instructional strategies and content, including research, development, and management of modular technology instructional systems. Prerequisites: 330:190 or consent of instructor; junior standing, (Offered Spring)

## 330:180. Orientation to Career and Technical Education - 2 hrs.

Sequence of learning experiences enabling the participant to demonstrate pre-service teaching competencies as required by the State Plan for the Administration of Career and Technical Education within Career Education for Iowa. (Variable)
330:181(g). Instructional Design for Career and Technical Education 2 hrs.
Basic methods of identifying, analyzing, selecting, and organizing instructional content for career and technical programs. Prerequisite: junior standing. (Variable)

## 330:182(g). Coordination of Techniques in Career and Technical <br> Programs - 2 hrs.

Planning, organization, development, and teaching of cooperative or multi-occupational programs in career and technical education. Prerequisite: junior standing. (Variable)

## 330:183. Fundamentals of Manufacturing Engineering - 3 hrs.

Application of technical knowledge to solve industrial problems within the functional area of manufacturing engineering. Preparation for examination through the manufacturing Engineering Certification Institute. Prerequisite: junior standing or consent of instructor. (Variable) 330:184(g). Advanced Controls and Processes - 3 hrs.
Feedback control system performance and stability, Introduction to digital controllers and digital control systems. Transform theory; advanced dynamic stability and performance concepts. Analog and digital simulation. Prerequisites or corequisites: $330: 129 ; 800: 060 ; 800: 061 ; 880: 054$ or 880:130; 880:056 or 880:131; junior standing. (Offered Spring)
330:185 (g). Methods Improvement and Quality Control Assurance in Construction - 3 hrs.
Analysis and evaluation of methods improvement techniques and management of quality assurance and quality control. Prerequisites: 330:154; junior standing. (Offered Fall)

## 330:187(g). Applied Industrial Supervision and Management - 3 hrs.

Investigation of industrial supervision and management; includes directed field study in industry. Prerequisites: 150:153 or $\mathbf{3 3 0 : 1 4 3}$ or consent of instructor; junior standing. (Offered Fall and Spring)
$330: 188(\mathrm{~g})$. Nanotechnology Fabrication - 3 hrs.
Developmental analysis of nanotechnological fabrication developments with a focus on nanoparticles, nanoscale devices, production techniques, and their interdisciplinary applications in various industrial fields such as material science, manufacturing, physical sciences, and electronic technology. Prerequisites: 330:192; junior standing. (Variable) 330:190(g). Technology Education Teaching Methods - 3 hrs.
Methods of teaching in technology education and related fields, including group and individualized instructional strategies. Includes 15 hours of field experience. Must complete with minimum grade of C prior to student teaching. Prerequisites: 330:019; 12 semester hours in industrial technology; junior standing. (Offered Spring)

330:191(g). Implementing Career and Technical Programs - 2 hrs.
Basic principles of instruction, instructional organization, methods of presentation, lesson planning, and applications of audio-visual media. Prerequisite: junior standing. (Variable)

## 330:192(g). Non-Destructive Evaluation of Materials/Scanning Electron

Microscopy - 3 hrs.
Non-destructive evaluation of materials using such techniques as $x$-ray, gamma ray, liquid penetrant tests, magnetic particle, eddy currents, SEM, etc. Prerequisites: 330:132 or $330: 172$ or consent of instructor; junior standing. (Variable)
330:193(g). Evaluation in Career and Technical Programs - 2 hrs.
Basic concepts and techniques for evaluating students and programs in career and technical education. Prerequisites: 330:181 or consent of department; junior standing. (Variable)

## 330:194(g). Graphic Arts Estimating and Management - 3 hrs.

Managing a graphic arts business, and the calculation of costs and pricing associated with the production of printed materials. Prerequisites: 330:055; junior standing. (Offered Spring)

## 330:195(g). Technology Education Program Management - 3 hrs.

Design of safe and effective facilities for technology education and related fields, facility management, and development of a safety program. Prerequisites: $330: 120$ or $330: 190$; junior standing. (Offered Fall)

## 330:196(g). Industrial Safety - 3 hrs .

Examination of the directives mandated by the Occupational Safety and Health Administration. Emphasis on developing and implementing a comprehensive safety and health program. Prerequisite: junior standing. (Offered Fall and Spring)

## 330:197. Industrial Projects II - 2 hrs.

Cross-disciplinary teams work to research and develop a project with industrial partners. Implementation phase includes research, testing, fabrication, and product/process documentation. Second semester culminates in project completion and seminar presentation. Prerequisite: 330:112. (Offered Spring)
330:198. Independent Study.
(Variable)
330:200. Industrial Technology Concepts and Issues - 2 hrs.
Survey of the major topic areas of industrial technology and the professional issues in the field with the development of a Personal Career Development Plan (PCDP) in respect to those concepts, issues, and concerns. Prerequisite: consent of department or instructor. (Offered Fall)
330:228. Contemporary Theories in Technology - 3 hrs.
Analysis of developing technology, innovations, and practices in manufacturing and other industrial sectors related to industry. (Offered odd Springs)
330:240. Environmental Technology Processes - 3 hrs.
Advanced topics in environmental technology. Includes water and wastewater treatment processes, hazardous materials treatment processes, air and water pollution abatement technologies, and recycling and reuse treatment technologies. (Offered even Falls)
330:245. Technology and Management of Waste Materials - 3 hrs.
Advanced topics in technology and management of waste materials. Examines technology and means to manage waste, waste problems, and processes. Study of the types of waste, relevant legislation and regulations, risk assessment, and site remediation. Examination of technology and management alternatives such as source reduction, process modification, reuse and recycling, and analysis of current situations. (Offered odd Springs)

## 330:250. Technology of Productivity Improvement - 3 hrs.

Exploration of productivity as an operational concept; analysis of productivity in industrial settings to seek improvement through technical and managerial expertise. Prerequisite: admission to graduate standing in industrial technology or consent of instructor. (Offered even Falls)

## 330:258. Total Quality Management - 3 hrs.

Managerial, technological, behavioral, and statistical concepts applied to total quality management. Quality management philosophies, continuous improvement, productivity, and issues affecting quality that apply to manufacturing, service, and technological organizations. Prerequisites: program approval and advisor endorsement, or approval of instructor.
(Offered odd Falls)

## 330:260. Occupational Safety and Health Principles - 3 hrs.

Emphasis on the principles of safety management with focus on elements of an effective safety program, organizing and decision making, safety organization, accident investigation, and situations where programs and techniques of occupational safety training can be developed. Includes hazard analysis and risk assessment, problem analysis and system safety techniques, labor/management safety committee. Prerequisite: 330:196 or consent of instructor. (Offered odd Springs)
330:270. Research Projects in Industrial Technology - 3 hrs.
Problems involve investigation, application, demonstration, and reporting of research findings in specialized areas of industrial technology. May be repeated for maximum of 9 hours. Prerequisite or corequisite: 330:292 or consent of instructor. (Offered odd Falls and even Springs)
330:282. Industrial Technology Seminar - 1 hr.
Selected problems relating to production, communication, and power systems. May be repeated for maximum of 4 hours. (Offered Fall and Spring)
330:283. Research Prospectus Seminar - 1 hr .
Supervised writing and research leading to the development and presentation of a prospectus for graduate research. Prerequisites: 330:292; advisor approval. (Variable)
330:284. Industrial Technology - 2 hrs.
Offered in separate areas as shown in Schedule of Classes. Credit may be earned in more than one area but not repeated in a single area. Requires written consent of instructor. (Offered Fall and Spring)
330:288. Field Study in Industrial Technology: Masters Internship 3 hrs.
Supervised practicum in an industrial organization, public service agency, or education setting. A proposal must be approved by department advisor and setting supervisor prior to registration. Prerequisites: limited to master's degree candidates; program approval and advisor endorsement. (Formerly 330:271) (Offered Fall and Spring)
330:290. Training and Development in Industrial Technology - 3 hrs.
Systematic application of training to enhance industrial productivity and development of the various techniques and skills to assess training needs, develop and evaluate training programs, and manage the training process in an industrial environment. (Offered odd Falls)
330:291. Technical Program Development - 3 hrs.
Development of skills and techniques in the method of identifying, analyzing, selecting, and organizing instructional content. Consideration for installation, operation and evaluation of a curriculum plan in industrial technology areas. Prerequisite: 330:290 or consent of instructor. (Offered even Springs)
330:292. Research Methods in Industrial Technology - 3 hrs.
Principles of methods and evaluation of research in industrial technology. Individual exploration of possible projects or thesis topics. (Offered even Springs)

## 330:294. Technological Evolution and Innovation - 3 hrs.

Overview of technology - its chronological development and evolution. Interrelationships among disciplines and influence of contemporary technology on industry, culture, education, and society. (Offered even Falls)
330:295. Advanced Management and Supervision Technology - 3 hrs.
Development of knowledge, skills, and advanced application experiences of management technologies utilized in industrial supervision and
management. Prerequisites: $150: 153$ or $330: 143 ; 330: 187$; or consent of instructor. (Offered even Springs)
330:296. Research Design in Industrial Technology - 3 hrs.
Emphasis on the relationships between theory, planning, research desigy instrumentation assessment and administration, data collection and analysis, and the interpretation of findings. Includes critical reviews of previous research and preparation of proposal manuscripts. Prerequi sites: 250:180; 330:292 or consent of instructor. (Offered odd Falls) 330:299. Research (Masters Thesis).
(Offered Fall and Spring)
330:300. DIT Post Comprehensive Registration.
(Offered Fall and Spring)
330:375. Historical Developments in Industrial Technology - 3 hrs.
Development of production, communication, and power systems and their influence on society and the environment. Prerequisite: consent of instructor. (Offered Fall)

## 330:376. Contemporary and Future Developments in Industrial

Technology - 3 hrs .
A study with emphasis on production, communication, and power systems; and their interrelationship with people, society, and the environit ment. Prerequisite: 330:375. (Offered Spring)
330:377. Readings in Technology and Society - 3 hrs.
Current readings on technology and society; emphasis on analysis and discussion of the issues. Prerequisite: 330:376. (Variable)
330:378. Technology, Ethics and the Technologist - 3 hrs.
Examination of the values and ethics of a technological society and the input of the technologist into the decision-making process of a techno logical organization. Prerequisites: 330:375; 330:376; 330:377; or consen4 of instructor. (Variable)
330:388. Doctoral Internship - 6 hrs.
Offered in education and industry to provide practical experience in teaching, supervision, administration, or management. May be taken once in educational environment and once in industrial environment Prerequisites: consent of advisor; advancement to candidacy; completio1 of at least 21 semester hours in required core. (Offered Fall and Spring) 330:399. Research (Doctoral Dissertation).
Prerequisites: successful completion of 40 credit hours in approved program of study, internship, and approval of dissertation proposal. (Offered Fall and Spring)

## 350 School Library Media Studies

## 350:010. Library Orientation - $1 \mathbf{h r}$.

Practical working knowledge of the library and its resources. Open to freshmen and sophomores. (Offered Fall and Spring)
350:112. Library Information Sources - 1 hr.
Utilization of indexes, documents, and reference sources in specifie subject areas; performance of information searches on specialized top? ics. Open to juniors/seniors with declared majors. (Not open to School Library Media Studies majors and minors.) (Offered Fall and Spring) 350:113(g). Coilection Management - 3 hrs.
Analysis and evaluation of information sources in school library media collections. Selection, acquisition, and maintenance of materials in printm non-print, and computer-assisted formats. Intellectual freedom and copyright policy development. Prerequisite: junior standing. (Offered Fall and odd Summers)
350:115(g). Organization of Information - 3 hrs.
Application of standards of descriptive cataloging and MARC record for manual and automated systems and resource sharing. Examination of number and subject classification schemes and application of Dewey Decimal Classification and appropriate subject headings for school library media catalogs. Adaptations of organizational principles
for non-book print, non-print media, and computer-assisted information sources. Lecture, 2 hours; lab, 2 hours. Prerequisite: junior standing. (Offered Fall and even Summers)

## 350:121(g). Introduction to the School Library Media Program - $\mathbf{3}$ hrs.

Survey of school library media specialists, functions of the school library media center, national and state professional guidelines, ethical and legal issues; includes observation and participation in a selected school library media center. The portfolio created in this course becomes the condition for continuation in the School Library Media Studies program, and must be taken in the first semester. Prerequisite: junior standing. (Offered Fall, Spring, and Summer)

## 350:132(g). Library Resources for Children - 3 hrs.

Collection management strategies as these relate to resources available in , and accessible from, elementary school library media centers, with a focus on resource-based teaching and learning. Role of the school library media specialist as information specialist. Prerequisite: junior standing. (Variable)

## 350:134(g). Library Resources for Young Adults - $\mathbf{3}$ hrs.

Collection management strategies as these relate to resources available in, and accessible from, secondary school library media centers, with a focus on resource-based teaching and learning. Role of the SLMS as information specialist. Prerequisite: junior standing. (Variable)

## 350:223. School Library Media Curriculum Development - 3 hrs.

Consultant role of the school library media specialist in curriculum design. Study of curriculum frameworks and the curriculum integration of information process models, PK-12. Prerequisites: 350:121; 350:132 or 350:134. (Offered Fall and even Summers)

## 350:225. Administration of the School Library Media Program - 3 hrs.

Management and leadership role of the school library media specialist, including organizational strategies, planning, and policy development. Should be taken in the final semester of course work. Prerequisite: 350:121. (Offered Spring and odd Summers)

## 350:230. Library Automation Systems and Networks - 3 hrs.

Emphasis on computer-related systems and networks in schools and library media programs. Planning and implementing systems; on-line network requirements and uses. Prerequisites: 350:115; 350:132 or 350:134; 350:250. (Offered Fall and odd Summers)

## 350:250. Reference Services and Information Retrieval - 3 hrs.

Collection management strategies as these relate to basic print and electronic reference resources. Introduction to question-negotiation, search strategies, and evaluation of information delivery/approaches and systems. Provision of reference services in school settings. Roles of the SLMS as information specialist and teacher. Lecture, 2 hours; lab, 2 hours. Prerequisite: 350:115. (Offered Fall and even Summers)
350:285. Individualized Readings - $\mathbf{1 - 3} \mathbf{~ h r s . ~}$
Directed study of specific issue or problem based on student's needs or aspirations. Prerequisite: written consent of instructor. (Offered Fall, Spring, and Summer)

## 350:299. Seminar - 3-6 hrs.

Critical assessment of the elements of school library media services at the building and system levels. Prerequisite: 350:223. (Variable)
350:290. Practicum - 2-4 hrs.
Experience in the function and services of the school library media center. Prerequisite: written consent of instructor. (Offered Fall, Spring, and Summer)
350:295. Research in Library and Information Science - $\mathbf{3}$ hrs.
Survey of basic research methodologies and critical evaluation of library media center research studies. The use of the research process to develop a draft proposal for a research study, or project. Prerequisite: 350:250. (Offered Spring and even Summers)
350:299. Research.
Focus on the process of completing the research study, project, or thesis. Must be taken during the semester when the study is completed and
may be repeated. Student must enroll in at least 1 credit hour during the semester the study is completed. Prerequisite: 350:295. (Offered Fall, Spring, and Summer)

## 400 Psychology

## 400:001. Introduction to Psychology - 3 hrs.

Survey of basic principles in psychology. Course requires participation in psychological research; or an alternative acceptable to both students and the department which provides a similar educational experience. (Formerly 400:008) (Offered Fall, Spring, and Summer)

## 400:020. Community Service/Experiential Learning - 1-3 hrs.

Students explore posential career options via volunteer opportunities at an approved location from 3-9 hours per week, after completing training required by the specific agency. Serves as a valuable hands-on learning experience. May be repeated for maximum of 6 hours. Prerequisites: 400:001; consent of instructor. (Offered Fall and Spring)

## 400:025. Psychology of Work - 3 hrs.

Overview of various areas traditionally studied within industrial/ organization (IO) psychology. I/O psychology includes various aspects of people in the workplace with focus on issues surrounding employee productivity and well-being. Prerequisite: 400:001. (Offered Fall)
400:050. Behavior Modification - 3 hrs.
Behavioral approach to behavior change based upon learning principles. Emphasizes analysis of ongoing behavior and the means of implementing change in a variety of everyday situations. Prerequisite: 400:001 or equivalent. (Formerly 400:123) (Variable)

## 400:054. Psychology of Adjustment - 3 hrs.

Study of "normal" adjustment problems encountered in our everyday lives. Topics include fear and anxiety, sleeping difficulties, sexual adjustment, self control, interpersonal relations, adjustment at work, social adjustment, love, marriage, and parenting. Prerequisite: 400:001. (Formerly 400:104) (Offered Fall and Spring)

## 400:060. Psychology of Gender Differences - 3 hrs.

General overview of the nature and meaning of gender, gender roles, and stereotypes; research on gender similarities and differences; gender development; and the effects of stereotypes and roles. Prerequisite: 400:001. (Formerly 400:110) (Offered Fall, Spring, and Summer)

## 400:070. Psychology and Law - 3 hrs.

Study of psychological theory and empirical research as it relates to the law. Topics include witness memory, suspect identification, lineup procedures, false confessions, lie detection, juror cognition, and jury decision making. Prerequisite: 400:001. (Same as 980:070) (Offered Fall and Spring)

## 400:101. Research Methods - 4 hrs.

Introduction to fundamentals of psychological inquiry. Emphasis on experimental research but all major approaches (correlational, field, clinical, phenomenological) considered. Prerequisite: 400:001; must be a declared Psychology major or minor by the starting date of the course. (Formerly 400:045) (Offered Fall and Spring)

## 400:102. Psychological Statistics - 4 hrs.

Introduction to the basic methods of collecting, organizing, and analyzing psychological data. Emphasis on statistical inference (e.g., $t$ tests, $F$ tests, and selected non-parametrics). Provides the student with the basic statistical concepts and skills necessary for the laboratory and survey work and to provide adequate quantitative background for understanding psychological literature. Prerequisites: 400:001; 400:101; one collegelevel mathematics course or consent of instructor. (Formerly 400:049) (Offered Fall and Spring)

## 400:106(g). Psychology of Human Differences - 3 hrs.

Nature and extent of human differences as they apply to an understanding of general psychology of the individual and group differences in a
social setting. Prerequisites: 400:001; 400:101; junior standing. (Offered Spring and Summer)

## 400:118(g). History and Systems of Psychology - 3 hrs .

Survey of the history of psychology. Topics include philosophical influences, schools of thought, biographies of prominent psychologists, methodology, and important studies. Examination of the psychology of science. Prerequisites: one course in psychology or consent of department; junior standing. (Offered Fall, Spring, and Summer)

## 400:120. Developmental Psychology - 3 hrs .

Theory and research methods used in the study of development of organisms (especially human); developmental perspective as part of the process of psychological inquiry. Prerequisite: 400:001 or equivalent. (Offered Fall and Spring)

## 400:125(g). Child and Adolescent Psychopathology - 3 hrs.

Overview of childhood problems ranging from minor problems in adjustment to severely disabling disorders; primary focus on research findings relevant to assessment, etiology, prognosis, and management. Prerequisites: $400: 001$; plus any one from 200:100, 31F:055, $400: 120$, or equivalent of one of these, or consent of instructor; junior standing. (Offered Fall)

## 400:127(g). Introduction to Neurology - 3 hrs.

Introduction to basic nervous system structure and function including the neuron, peripheral nervous system, the senses, the brain stem, neural control of movement and coordination, the forebrain and its specific functions, and brief coverage of methods of study and clinical neurology. Prerequisites: 400:001; junior standing; written consent of instructor. (Offered Spring)
400:130(g). Computer Applications for Psychological Research - 3 hrs . Computer programming and applications related to psychological research, statistical analyses, and reporting. Prepares students to develop and program computer-based and internet-based research applications to facilitate psychological research and data collection. Prerequisites: $400: 001 ; 400: 101 ; 400: 102$; junior standing. (Variable)

## 400:132(g). Psychology of Music - 2 hrs.

Introduction to the scientific study of psychology of music. Topics include physics of sound and psychoacoustics, pitch and rhythm representation, development of musical intelligence, emotion and meaning in music, functions of music in society, and music therapy. Prerequisites: 400:001; junior standing. (Offered Fall)

## 400:134(g). Motivation and Emotion - 3 hrs.

Investigation of the major factors underlying human actions. Topics include hunger and eating, sexual behavior, arousal, attention, and performance, sleep and dreams, drug addiction, anger and aggression, and their relation to various emotional states. Prerequisites: 400:001; junior standing. (Offered Spring)

## 400:142(g). Abnormal Psychology - 3 hrs.

Definition, classification, and characteristics of abnormal behaviors and major mental disorders. Review of the causes and treatment of major mental disorders. Prerequisites: 400:001; junior standing. (Offered Fall, Spring, and Summer)

## 400:149(g). Principles of Psychometrics - 3 hrs.

Exploration of contemporary theories and principles basic to the construction and clinical use of psychological tests. Students will learn how to (a) critically evaluate psychological tests (e.g., self-report and interview methods) and (b) develop and validate self-report instruments, using contemporary psychometric principles and procedures. Prerequisites: 400:101; 400:102; junior standing. (Offered Spring)
$400: 150(\mathrm{~g})$. Conditioning and Learning - 3 hrs .
Survey of conditioning and learning including classical conditioning, operant conditioning, conditional discrimination, verbal behavior, and remembering in humans and animals. Emphasis on how the field relates to modern psychology and everyday life. Prerequisites: 400:001; 400:101;
junior standing. (Offered Fall)
400:151(g). Memory and Language - 3 hrs .
Memory topics include theories of memory, memory deficits, and the role of memory in broader cognitive processes. Language topics includ theories of language, biological bases of language; and comprehensiuil and production of language. Prerequisites: 400:001; 400:101; juniom standing. (Offered Fall)

## 400:152(g). Sensation and Perception - 3 hrs.

Examination of relationship between physical world and perceptionl, anatomy and physiology of brain structures responsible for perception, algorithms involved in perception, and development of perceptual procesy ing systems. Focus on the visual system. Prerequisites: 400:001; 400:101 junior standing. (Offered Fall and Spring)

## 400:153(g). Cognitive Psychology - 3 hrs.

Study of human cognition: obtaining, representing, and organiziry knowledge. Topics include pattern recognition, attention, imagery, concepts, and mechanistic assumptions underlying cognitive psychology Prerequisites: 400:001; 400:101; junior standing. (Offered Spring)

## 400:154(g). Health Psychology - 3 hrs.

Overview of the contribution of social, personality, and clinical psychol ogy to: a) an understanding of the psycho-social variables affecting physical illness and disease; b) the development of assessment and interventiot strategies for comprehensive illness management and rehabilitation; and c) the promotion and maintenance of health-enhancing behavior. Prerequisites: 400:001; junior standing. (Offered Fall, Spring, and Summer)
400:155. Biopsychology - 3 hrs.
Introduction to the biological basis of behavior. Consideration of the roles of brain function, hormones, heredity and evolutionary history as they relate to sex differences, psychopathology, language, emotioul memory, sleep, and sensation/perception. Consideration of basic neuroanatomy and comparative approaches. Prerequisite: 400:001 or consen, of instructor. (Offered Fall and Spring)

## 400:157(g). Personnel Psychology - 3 hrs.

Processes involved in recruiting, selecting, training, and evaluating employees in all types of organizations; prominent theories and curren, techniques in use. Prerequisites: 400:001; junior standing. (Offered Fall) 400:158(g). Organizational Psychology - 3 hrs .
Work motivation, job satisfaction, work group influences, and the struc $\downarrow$ ture of work; explores the most influential theories in the field and the most widely-used applications of theories. Prerequisites: 400:001 or equivalent; junior standing. (Offered Fall and Spring)
400:160. Social Psychology - 3 hrs.
Overview of social psychology. Includes social perception and cognition attraction and liking, social influence, group dynamics, and attitud formation and change. Prerequisite: 400:001 or equivalent. (Offered Fall and Spring)

## 400:161. Psychology of Personality - 3 hrs.

Introduction to major theoretical models of personality and to applicat tions derived from these theories, and an overview of empirical finding in selected topics in personality. Prerequisite: 400:001. (Variable)

## 400:162(g). Special Topics in Social Psychology - 3 hrs.

In-depth coverage of an applied topic in social psychology and the design of social psychology research. Students will be required to complet a project, which may or may not include the collection of data, in the topical area. Topics may include, but are not limited to, social cognition emotion, interpersonal relationships, aggression, persuasion, altruisti. behavior, identity and group dynamics. Prerequisites: 400:001; 400:101 400:160; junior standing. (Variable)
400:163(g). Special Topics in Developmental Psychology - 3 hrs.
Examination of selected topics within the field of developmental psychol ogy viewed from various theoretical and empirical perspectives. Topio may vary each semester. Prerequisites: 400:001; 400:101; 400:120; junio
standing. (Offered Fall and Spring)
400:166(g). Clinical Psychology - 3 hrs.
Contemporary practice of clinical psychology with emphasis on the theories and techniques of cognitive-behavioral interventions. Prerequisites: 400:001; junior standing. (Variable)

## 400:167(g). Gender in Cross-Cultural Perspective - 3 hrs.

Evolutionary, biological, psychological, cognitive, social, and cultural theories of gender and gender inequality evaluated with respect to crosscultural data. Prerequisites: 400:001 or 980:001 or 990:011; junior standing. (Same as $980: 167 \mathrm{~g}$ and $990: 167 \mathrm{~g}$ ) (Offered odd Springs)
400:170(g). Drugs and Individual Behavior - 3 hrs.
Survey of the effects/side-effects of all categories of psychoactive drugs on brain, body, and behavior. Covers patterns of use and/or abuse of prescription, non-prescription and street drugs as well as an introduction to drug abuse treatment. Prerequisite: junior standing. (Offered Fall and Spring)

## 400:173(g). Psychology of Aging - 3 hrs.

Analysis of the factors affecting adult development and aging. Emphasis on physiological, cognitive, sensory, personality, and interpersonal changes occurring with age. Prerequisites: 400:001 or equivalent; junior standing. (Variable)

## 400:177. Language and Culture - 3 hrs.

Examination of how language use shapes and expresses cultural identity. Implications of linguistic diversity of world view, gender and ethnic identity, education, and cross-cultural communication. Prerequisite: 400:001 or 980:001 or 990:011. (Same as 980:177 and 990:177) (Offered Fall) 400:189(g). Seminar in Psychology - 1-3 hrs.
Provides opportunity to correlate previous course work and knowledge in field of psychology. May be repeated for maximum of 6 hours. Prerequisites: 400:001; 400:101 or consent of instructor; 15 hours in psychology; junior standing. (Variable)

## 400:192(g). Practicum in Teaching Psychology - 2-3 hrs.

Organization and teaching of psychology; student serves as participantobserver, with advance approval, in any 400:xax course. May be repeated for maximum of 6 hours. Prerequisite: junior standing. (Offered Fall, Spring, and Summer)

## 400:193(g). Research Experience in Psychology - 1-3 hrs.

Conduct a supervised research or scholarly project. May be repeated for maximum of 6 hours. Highly recommended for students planning to enter graduate programs. Majors with an overall GPA of at least 3.50 may earn departmental honors if their projects are deemed worthy of honors by the department. Prerequisites: 400:001; 400:101; 15 hours in psychology; junior standing; consent of instructor. (Offered Fall, Spring, and Summer)

## 400:218. Brain, Biology and Behavior - 3 hrs.

Biological foundations of human behavior; biology and environment interaction, theoretical analyses of research on human development; biological foundations of abnormal behavior, personality and sex differences; brain pathology; functional significance of various neurotransmitters and hormones. Prerequisite: graduate standing in psychology or consent of instructor. (Offered odd Springs)
400:220. Developmental Psychology - 3 hrs.
In-depth, critical analysis of major theories of developmental psychology and their application to practical situations. Discussion of psychoanalytic, ethological, behaviorist, social learning, cognitive, and contextual approaches to development. Prerequisites: an undergraduate course in developmental psychology; graduate standing. (Offered even Falls)
400:225. Psychopathology - 3 hrs .
Examination of alternative models of psychopathology with emphasis on genetic, physiological, and developmental determinants of behavior disorders. Review of the empirical literature on the etiology, maintenance, and treatment of disordered behavior. Prerequisite: graduate standing in
psychology or consent of instructor. (Offered Spring)
400:232. Training and Instructional Design - 3 hrs.
Exploration of recent theories of organization training with emphasis on instructional design. Students will compare and contrast trade approaches to academic approaches to training and will demonstrate competencies in developing and delivering training tools. Prerequisite: graduate standing in psychology (industrial/organizational emphasis) or consent of instructor. (Offered Fall)

## 400:234. Recruitment and Selection - 3 hrs .

Focused seminar covering the recruitment and hiring of employees using lectures, discussion of key readings, and directed activities in a HR context. Topics include: recruitment, validity in selection, use of tests in selection, and legal topics. Prerequisite: graduate standing in psychology or consent of instructor. (Offered Spring)
400:237. Performance Appraisal - 3 hrs.
Development of criteria and methods for appraising work performance in a variety of organizations. Major topics include job analysis, criterion development, legal considerations, performance appraisal methods, and properties of appraisal data. Prerequisite: graduate standing in psychology (industrial/organizational emphasis) or consent of instructor. (Offered Spring)

## 400:239. Advanced Statistics - 3 hrs.

Review of elementary descriptive and inferential statistics, analysis of variance and covariance models, multiple linear regression and the generalized linear model, and specialized topics in multivariate analysis. Prerequisites: previous courses in statistics; graduate standing in psychology or consent of instructor. (Offered Fall)
400:244. Ethical Issues in Psychological Intervention - 1 hr .
Review of ethical and professional issues related to practice of clinical psychology, including the role of professional organizations, current APA ethical standards, rights of clients, and obligations and requirements of professionals in clinical psychology. Prerequisite: graduate standing in psychology (clinical science emphasis). (Offered Spring)
400:246. Ethical Issues in Psychological Assessment - 1 hr.
Review of critical ethical and professional issues related to practice of psychological assessment, including the changing roles of assessment in various clinical populations, the role of ethics in research, and the importance of a multicultural awareness in the practice of clinical psychology. Prerequisite: graduate standing in psychology (clinical science emphasis). (Offered Fall)

## 400:249. Cognitive and Intellectual Assessment - 3 hrs.

Introduction to the nature, use, and interpretation of tests for assessing intelligence and other cognitive functions in varied populations in this and other cultures. Prerequisite: graduate standing in psychology (clinical science emphasis) or consent of instructor. (Offered Fall)
400:261. Personality - 3 hrs.
Comparative study of major personality theories and techniques of personality assessment. Prerequisite: graduate standing in psychology or consent of instructor. (Offered even Springs)
400:262. Personality Assessment - 3 hrs.
Overview of theoretical and empirical issues in the measurement of personality. Examines reliability and validity of projective and actuarial methods of personality assessment, criticism of traditional approaches to personality assessment, and behavior assessment as an alternative to traditional approaches. Prerequisite: graduate standing in psychology or consent of instructor. (Offered Spring)

## 400:264. Social Psychology - 3 hrs.

Covers the major areas of classic and current research in social psychology. Students engage in an in-depth, critical analysis of the research in areas including, but not limited to, conformity, obedience, social norms, social cognition, interpersonal relationships, aggression, and helping behavior. Substantial proportion of the course focuses on social cognition.

Examines the socio-historical context of social psychology and the application of social psychological research. Prerequisites: an undergraduate course in social psychology; graduate standing in psychology or consent of instructor. (Offered Fall)

## 400:270. Theories, Research, and Practice of Psychological Treatment - 3 hrs .

Reviews the major theoretical approaches to psychological treatment, covers relevant empirical and clinical issues, and facilitate proficiency in fundamental therapy skills. Prerequisite: graduate standing in psychology. (Offered Fall)
400:272. Empirically Supported Psychological Treatments - 3 hrs .
Survey of behavior change strategies documented as effective by a body of supporting psychological research. Comparison of these techniques with non-psychological (drug) treatments as well as with non-empirically supported psychological treatments. Prerequisite: graduate standing in psychology or school psychology. (Offered Spring)
400:289. Seminar.
(Variable)
400:297. Practicum.
Supervised field placement in a mental health or other agency offering psychological services. Prerequisites: 400:249; 400:262; B+ or better in 400:270; graduate standing in psychology. (Offered Fall and Spring) 400:299. Research.
(Offered Fall, Spring, and Summer)

## 410 Health Promotion and Education

410:005. Orientation to Health Promotion - 1 hr .
Orientation to (1) the process and profession of health education, (2) the competencies and skills necessary for successful entry into the profession, and (3) the responsibilities of health educators in various professional employment settings. (Offered Fall and Spring)

## 410:015. Personal Health - 2 hrs.

Designed to develop the understandings, attitudes, and practices which contribute to better individual health. (Offered Fall, Spring, and Summer through correspondence study only)
410:020. Maternal and Infant Health - 2 hrs.
Introduction to contemporary issues affecting the health of women and children during the prenatal and postnatal period; emphasis on conception, pregnancy, childbirth, lactation, and early infancy stages. (Offered Fall)

## 410:060. Medical Terminology - 2 hrs.

Basic terminology and vocabulary used in medical field; structural organization of the body, major anatomy, medical procedures and instrumentation, and medical specialties. (Offered Fall, Spring, and Summer through correspondence study only)
410:110. Introductory Epidemiology - 3 hrs .
Introduction to the principles and methods of epidemiology. (Offered Fall and Spring)

## 410:112. Human Structure and Function - 3 hrs .

Examination of skeletal, muscular, nervous, endocrine, lymphatic, circulatory, respiratory, digestive, urinary, and reproductive systems. No lab. (Offered Fall and even Springs)

## 410:118. Teaching Aerobics - 1 hr .

Preparation to teach aerobic activities, including aerobic dance, step and circuit aerobics, and aerobic kick boxing. (Variable)
410:120(g). Death Education - 2 hrs.
Examination of the need for death educators to be personally comfortable with thanatology. Knowledge of death concept development among children, methods, and ethical issues related to death education with child and adult populations. Prerequisite: junior standing. (Offered odd Springs)

## 410:125(g). Aging and Health - 3 hrs.

Introduction to basic aging and health concerns of older individuals, and to broader issues of aging, health, and society. Study of aging demograpi. ics, biomedical aspects of aging, and selected issues of health and aging Prerequisite: junior standing. (Offered Spring)
410:128(g). Selected Topics in Women's Health - 3 hrs.
In-depth development and exploration of selected themes and topics in women's health. Focus on "hidden" health issues that disproportionat ? affect women and examination of health issues and prevention programa surrounding adolescent pregnancy, violence, substance abuse, and disorel dered eating through a feminist developmental perspective. Prerequisire junior standing. (Offered Spring)
410:131(g). Worksite Health Promotion - 3 hrs.
Models of delivery of health promotion programs to employee populit tions. Prerequisite: junior standing. (Formerly 410:255) (Offered Fall)
410:135. Elementary School Health Education Methods - 2 hrs.
Examination of health and health education needs of elementary schood children and role of teacher in planning, delivering, and evaluatiny comprehensive school health education; introduction of instructionil methods and materials and their use demonstrated and practiced. (Of fered Fall and Spring)

## 410:138(g). International Health - 2 hrs.

Exploration of widely-different disease patterns found between developal and developing countries, and investigation of the complex factors that contribute to poor community heal th status. Discussion of wellness strated egies for populations in developing countries, as well as for minoritic immigrants, low income persons, and other underserved groups withil the United States. Prerequisite: junior standing. (Offered Spring)

## 410:140. Secondary School Health Education Methods - 2 hrs.

Examination of role of the teacher in planning, delivering, and evaluatin health education; introduction of instructional methods and materia and their use demonstrated and practiced. (Offered Spring)

## 410:142(g). Health Problems in the School — 2 hrs.

Awareness of student health and health problems; emphasis on preveri tion of health problems, class environment, communicable diseases and their control, and effective teacher referral within the school and to community health agencies. Prerequisite: junior standing. (Variable)

## 410:144. Health Education Curriculum - 2 hrs.

Introduction to existing curricular models and the processes involved in developing materials and the appropriate scope and sequence of learn ing activities in elementary, middle, and high school health education (Offered Fall)

## 410:145(g). Health Promotion Evaluation - 3 hrs.

Principles, methods, and procedures to evaluate health promotion pros grams. Prerequisites: 250:180 or 800:072 or equivalent; 410:153; 410:176; junior standing. (Offered Fall and Spring)

## 410:146(g). Current Issues in Health - 3 hrs.

Current health topics affecting individuals, communities, and the natio or world at large. Includes prevention and/or control of negative healthi effects of the issues covered. Prerequisite: junior standing. (Variable)
410:147(g). Minority Health - 2 hrs.
Exploration of health issues and problems faced by some Americans as a consequence of their minority status in the population. Includes clasi' discussions as well as field trips to relevant minority institutions and residential locations. Prerequisite: junior standing. (Offered Fall)
410:151(g). Nutrition for Health Promotion - 3 hrs.
For junior, senior, and graduate students in health promotion, as well as pre- and para-medical students to provide basic knowledge of the funday mentals of nutrition, related diseases/conditions, and current nutritional issues encountered by health professionals. Priority given to 410,420 , and 430 majors. Prerequisite: junior standing. (Offered Fall)

410:152(g). Alternative Health and Complementary Medicine - 3 hrs .
Description of complementary and alternative medicine which covers a broad range of healing philosophies, approaches, and therapies not taught widely in medical schools, not generally used in hospitals, and not usually reimbursed by medical insurance companies. Prerequisite: junior standing. (Offered even Springs)

## 410:153(g). Theoretical Foundations of Health Promotion and Education -3 hrs .

Selected social, behavioral, and communication theories and ethical principles underlying health education practice; emphasis on implications for health education. Prerequisites: 410:005; junior standing. (Offered Fall and Spring)

## 410:155(g). Stress Management - 2 hrs.

Introduction to stress and stress management, the relationship between stress and disease. Prerequisite: Health Promotion major; junior standing. (Offered Fall)

## 410:156(g). Implementing Health Promotion Programs - $\mathbf{3}$ hrs.

Methods, techniques, and resources used in implementing health promotion programs. Prerequisite: $410: 153 ; 410: 176$; junior standing. (Offered Fall and Spring)
410:160(g). Community and Public Heaith - 3 hrs.
Public health activities concerned with the protection and care of the community; survey of major specialty areas within the public health field. Prerequisite: junior standing. (Offered Fall and Spring)
410:161(g). Glohal Health Corps Mission - 3 hrs.
Intensive immersion opportunity to plan, implement, and evaluate a large-scale health promotion program on-site with an underserved community in the U.S. or abroad. Under faculty supervision, students will travel, live, and work among the target population. Offered credit/no credit basis only. May be repeated. Prerequisites: $410: 167$; junior standing. (Offered Spring)
410:162(g). Introduction to Women's Health - 3 hrs.
Survey of contemporary issues in women's health providing a thorough understanding of women's personal health status, needs, and resources; awareness of women's health issues worldwide and the political, cultural, economic, and psychosocial factors which affect the health of women. Prerequisite: junior standing. (Offered Fall)
410:163(g). Human Diseases - 3 hrs.
Systemic approach to study of human diseases emphasizing common physical disorders afflicting humans. Emphasis on developmental disorders, inheritance, cardiovascular disease, cancer, infectious diseases, and other common diseases. Current trends in diagnosis, treatment, and preventive measures. Prerequisites: 410:112 or both 840:101 and 840:102; junior standing. (Offered Fall and Spring)

## 410:164(g). Health Care and the Consumer - 2 hrs.

Selection and use of health care products and services, alternative health care, health care insurance systems, consumer protection. Prerequisite: junior standing. (Offered even Falls and Spring)
410:165(g). Environmental Health Science - 3 hrs.
Comprehensive survey of the interaction between human health and the quality and state of the natural environment. Prerequisite: junior standing. (Same as $830: 165 \mathrm{~g}$ ) (Offered odd Springs)
410:166(g). Environmental and Occupational Health Regulations 3 hrs.
Overview of environmental and occupational safety laws applied to the practice of environmental science. Emphasis on application of the legislation with a focus on regulations. Includes major environmental laws such as the National Environmental Policy Act, Clean Air Act, Clean Water Act, and the Occupational Safety and Health Act. Includes site visits. Prerequisite: junior standing. (Same as $830: 166 \mathrm{~g}$ ) (Offered even Springs)
410:167(g). Cultural Competency for Health Providers - 1 hr.
Overview of cultural factors that affect health status and practical methods for health providers to work more effectively with minorities, immi-
grants, and other underserved clients with unique socio-cultural barrier to care. Prerequisite: junior standing. (Offered Fall and Spring)
410:168. Field Experience in Health Promotion - 3, 6, or 12 hrs.
Experience in area of student's career objectives. Offered on credit/no credit basis only. Prerequisites: senior standing; consent of Division of Health Promotion and Education Coordinator of Student Field Experiences. (Offered Fall, Spring, and Summer)
410:176(g). Planning Health Promotion Programs - 3 hrs .
Social, epidemiological, behavioral, educational, and administrative factors in health promotion. Prerequisite: junior standing. (Offered Fall and Spring)
410:178(g). Health Advocacy, Social Action and Policy Development 3 hrs.
Knowledge and skills related to community organizing, coalition building, conflict resolution, political action, and policy development as those processes relate to the health of individuals and communities. Prerequisite: junior standing. (Offered Spring)

## 410:185. Readings in Health Education - $1-4$ hrs.

Credit based on student's proposal; to be determined at time of registration. Written contract will determine appropriate work load under credit guidelines. Prerequisite: consent of instructor. (Offered Fall, Spring, and Summer)

## 410:189. Seminar in Health Promotion - 3 hrs.

Focus on issues in community health education and the transition from student role to health educator or health promotion specialist role. (Offered Fall)
410:193. Internship Seminar - 1 hr.
Process seminar to focus on and maximize student learning from their internship experiences and aid in development of professional practices. May be repeated for maximum of 2 hours. Corequisite: 31G:195 or 410:168 or 980:184. (Same as 31G:193 and 980:193) (Offered Fall, Spring, and Summer)
410:197(g). Global Health Corps Domestic Practicum - 1-3 hrs.
Specialized academic training and supervised field opportunities conducting culturally-appropriate health education programs in the local community with diverse or underserved populations such as refugees, minorities, immigrants, and the indigent. Offered credit/no credit basis only. May be repeated. Prerequisite: junior standing. (Offered Fall and Spring)
410:220. Health Determinants - 3 hrs.
Students will integrate current research, theory, and empirical evidence to develop a better understanding of the determinants of health. Examines social, environmental, and individual determinants of health, and explores the linkages and pathways through which these factors operate. Prerequisite: graduate standing in Health Education or Public Health, or consent of instructor (Offered odd Springs)
410:271. Cardiovascular Physiology - 3 hrs.
In-depth study of the functioning of the cardiovascular and respiratory systems in the diseased and non-diseased state. Major topics include functional anatomy, cardiorespiratory control, arterial pressure, responses to exercise, electrical activity, and the effects of disease processes. (Same as 420:271) (Offered Fall)
410:285. Readings - 1-4 hrs.
(Offered Fall, Spring, and Summer)

## 410:289. Seminar.

Course may be repeated for additional credit. (Variable)
410:290. Philosophy and Ethics of Health Promotion/Education - 3 hrs.
Analysis of philosophical and ethical issues in health education. (Offered Fall)

## 410:293. Epidemiology - 3 hrs.

Principles and methods of epidemiology; understanding research related to the distribution, frequency, and determinants of disease in human
populations; focus on chronic and infectious disease epidemiology and selected topics in related epidemiologic fields. (Offered Fall)
410:295. Internship in Health Education - 2-6 hrs.
Health program experience with agencies other than the college or university. May be repeated once for credit. Prerequisite: consent of Division of Health Promotion and Education Coordinator. (Offered Fall, Spring, and Summer)
410:297. Practicum - 2-3 hrs.
(Offered Fall, Spring, and Summer)
410:299. Research.
Fee assessed separately for laboratory materials and/or binding of thesis/ research paper. (Offered Fall, Spring, and Summer)

## 420 Physical Education

420:001. (420:Axx series) Physical Education - 1 hr .
Work may be selected from activities as listed in the Schedule of Classes. Primarily for Liberal Arts Core credit for students admitted prior to Fall 1988. May be repeated.

The following six courses provide the development of fundamental skills and instructional techniques in the specified activities:
420:011. Fundamental Physical Activities - Aquatics - 1 hr.
Primarily for majors and minors in Physical Education. (Offered Fall and Spring)
420:012. Fundamental Physical Activities - Conditioning - 1 hr.
Primarily for majors and minors in Physical Education. (Offered Fall and Spring)
420:013. Fundamental Physical Activities - Dance - 1 hr.
Primarily for majors and minors in Physical Education. (Offered Fall and Spring)
420:014. Fundamental Physical Activities - Gymnastics - 1 hr.
Primarily for majors and minors in Physical Education. (Offered Fall and Spring)
420:015. Lifetime Activities I - 1 hr .
Primarily for majors and minors in Physical Education. (Offered Fall and Spring)
420:016. Lifetime Activities II - 1 hr.
Primarily for majors and minors in Physical Education. (Offered Fall and Spring)
420:017. Fundamental Physical Activities - Outdoor/Adventure Pursuits - $\mathbf{1}$ hr.
Primarily for majors and minors in Physical Education. (Offered Fall and Spring)
420:018. Prevention and Care of Injuries for the Physically Active 2 hrs.
Principles, practices, and techniques in the prevention and care of injuries for the physically active. Prerequisite: 420:024 or 420:050. (Offered Fall, Spring, and Summer)
420:019. Prevention and Care Laboratory - 1 hr .
Laboratory experiences in first aid, CPR, and care of injuries for the physically active. Opportunity is provided to become certified in American Red Cross First Aid, and Community CPR. Prerequisite or corequisite: 420:018. (Offered Fall, Spring, and Summer)

## 420:020. Activity for Aging - 2 hrs.

Study of theories of aging relative to physical activity, needs of older adults, motivation to be active, teaching older adults activity skills, and activity program availability for older adults. (Variable)
420:021. Movement Activities for Children - 2 hrs.
Developmentally-appropriate physical activities designed to promote the development, refinement, and utilization of fundamental movement actions and concepts during the early through late childhood years. Strategies for selecting and delivering appropriate activities to children. Prerequisite: 420:056. (Offered Fall and Spring)

420:024. Anatomy and Kinesiology - 3 hrs.
Attention to the skeleton, the muscular system, and to joint construca tion. Application to analysis of skills and techniques used in coaching (For coaching minors.) No credit for students with credit in 420:050 and $420: 151$. (Offered Fall and Spring)
420:025. Conditioning Theory and Practice - 2 hrs.
Theory and practice in training and conditioning of athletes; 2 period 4 (For coaching minors.) (Offered Fall and Spring)
420:031. Dance Composition - 2 hrs.
Application of art principles basic to good choreography; advanced techy nique and composition. Prerequisite: 420:013; two dance activity classem of different styles; consent of instructor. (Offered odd Falls)

## 420:034. Survey of Dance History - 3 hrs.

Survey of dance history from primitive times to the present with emphat sis on the relationship of dance and dance forms to the societies in which they developed and other art forms and the contributions of leading dance personalities. (Offered Fall and Spring)

## 420:036. Dance Performance - 1-2 hrs.

Credit for performance in approved dance choreography. May be repeat -1 ed for credit. Maximum of 2 hours may be used toward the Dance minors Prerequisite: consent of instructor. (Offered Fall and Spring)

## 420:037. Applied Choreography - 1-2 hrs.

Credit for approved choreography for dance performances and produc, tions. May be repeated for credit. Maximum of 2 hours may be used toward the Dance minor. Prerequisite: consent of instructor. (Offered) Fall and Spring)
420:042. Motor Learning and Performance Laboratory - 1 hr .
Use of scientific method and fundamental equipment to illustrate concepts of perceptual-motor behavior and variables which influence motor skill acquisition. Lab, 2 periods. (Variable)
420:045. Physical Education for the Elementary Grades - 3 hrs.
Teaching methods and experience in activities; 3 periods. No credit for students with credit in 440:045. Prerequisites: 200:030; sophomore standing. (Offered Fall and Spring)
420:050. Anatomy and Physiology of Human Movement - 3 hrs.
Anatomy and physiology of the human body focusing on the musculam and skeletal systems and the cardiovascular system. (Offered Fall and Spring)
420:053. Physical Activity for Health and Fitness - 3 hrs.
Identification and programming of physical activities appropriate for selective stages through the life span. Emphasis on the role of physical activity in the enhancement of health and fitness throughout the life span. Integration of experiential learning activities with cognitive subject matter. Prerequisites: $420: 050 ; 440: 010$. (Offered Fall and Spring)
420:056. Introduction to Motor Behavior - 3 hrs.
Introduction to the developmental and learning factors which influence the capability to move effectively throughout the life span. Prerequisite or corequisite: 400:001. (Offered Fall and Spring)
420:060. Lifeguard Training and Instruction - 2 hrs.
American Red Cross material in Basic Water Safety, Emergency Water Safety Lifeguard Training, and Lifeguard Instruction. Opportunity provided to become certified in the American Red Cross Lifeguarding, Lifeguard Instruction, and Health Services Program which is a prerequisite to becoming an instructor in any area of certification for the American Red Cross. (Offered Fall and Spring)
420:061. Water Safety Instruction - 2 hrs.
Materials related to the certification of instructors for water safety instruction. Any person wishing to teach aquatics is required to complete this course. Certification is possible through this. course. (Offered Spring)
The following eleven courses provide for the development of a high level of performance and comprehensive understanding and knowledge pertinent to
the specific activity:
420:101. Advanced Skill and Coaching Theory - Baseball -2 hrs. Prerequisite: beginning class or equivalent skill. (Offered Fall) 420:102. Advanced Skill and Coaching Theory - Basketball - 3 hrs. Prerequisite: beginning class or equivalent skill. (Offered Fall and Spring)
420:104. Advanced Skill and Coaching Theory - Football - 3 hrs. Prerequisite: beginning class or equivalent skill. (Offered Spring) 420:105. Advanced Skill and Coaching Theory - Golf - 2 hrs. Prerequisite: beginning class or equivalent skill. (Offered odd Falls) 420:107. Advanced Skill and Coaching Theory - Soccer - 2 hrs. Prerequisite: beginning class or equivalent skill. (Offered Spring) 420:108. Advanced Skill and Coaching Theory - Softball - 2 hrs. Prerequisite: beginning class or equivalent skill. (Offered Spring) 420:109. Advanced Skill and Coaching Theory - Swimming - 2 hrs. Prerequisite: beginning class or equivalent skill. (Offered even Falls) 420:110. Advanced Skill and Coaching Theory - Tennis - 2 hrs. Prerequisite: beginning class or equivalent skill. (Offered even Falls) 420:111. Advanced Skill and Coaching Theory - Track and Field - 2 hrs. Prerequisite: beginning class or equivalent skill. (Offered Fall)
420:112. Advanced Skill and Coaching Theory - Volleyball - 2 hrs. Prerequisite: beginning class or equivalent skill. (Offered Fall) 420:113. Advanced Skill and Coaching Theory - Wrestling - 2 hrs. Prerequisite: beginning class or equivalent skill. (Offered Spring) 420:118. Practicum in Coaching - 1-2 hrs.
Practical experience working with high school coaches; planning and conducting all phases of the program. May be repeated in a different sport for a total of two sports. Prerequisites: junior standing; consent of department. (Offered Fall and Spring)
420:120. Certified Pool Operators - 2 hrs.
Administration of programs, personnel, and facilities; includes pool management and maintenance. (Variable)
420:121. Sociology and Psychology of Physical Activity - 2 hrs.
Introduction to the sociological and psychological issues related to physical activity. Practical information for professionals working in either school or non-school settings dealing with persons involved in physical activity. (Offered Fall and Spring)
420:122. Psycho-Social Aspects of Competitive Sport - 2 hrs.
Introductory philosophical aspects of sport; psychological and sociological dimensions of competitive sport. (Offered Fall and Spring)
420:123. History of American Sport - 2 hrs.
Historical development of sport in relation to other institutions and social movements in American society. (Offered Spring)
$420: 127(\mathrm{~g})$. Organization and Administration of Competitive Sports -
2 hrs.
Organization, administration, and management of interscholastic, intercollegiate, and intramural sports programs. Prerequisite: junior standing. (Offered Fall and Spring)

## 420:129(g). Advanced Sports Theory - 2 hrs .

Advanced methods course on coaching concepts in specific sports: (1) baseball; (2) basketball; (3) field hockey; (4) football; (5) golf; (6) gymnastics; (7) soccer; (8) softball; (9) swimming; (10) tennis; (11) track and field; (12) volleyball; (13) wrestling. May be repeated for maximum of 6 hours. Prerequisites: junior standing; consent of department head for undergraduates. (Variable)
420:132. Dance Curriculum - 2 hrs.
Place of dance in the school curriculum: relationships, progressions, and curriculum building. Prerequisites: 420:013; two dance activity courses of different styles; consent of instructor, (Offered even Springs)
420:135. Dance Production and Performance - 2 hrs.
Application of technical considerations, costume design, accompaniment, and program planning. Practical application of choreography and/
or lecture demonstration in a dance form expected. (Offered even Falls) 420:140. Practicum - 1 hr.
Experiences working with elementary, secondary, adapted, or dance students in activities involving movement. May be repeated for a maximum of 4 hours. Prerequisites: methods course appropriate to area; consent of instructor. (Offered Fall, Spring, and Summer)
420:142. Fitness Facilities and Programming - 2 hrs.
Development of an understanding of state of the art fitness equipment, its uses, set-up, and benefits for a variety of populations and potential programming for such facilities. (Variable)
420:145(g). Development Aspects of Movement Performance - 2 hrs.
How motor skills change with time; nature of factors affecting change; relationship of motor development to total human development; principles of motor development related to teaching motor skills. Prerequisites: 200:030; junior standing. (Variable)
420:146. Movement Notation - 2 hrs.
Written notation system designed to record and analyze dance and human movement. (Offered odd Springs)
420:147. Adapted Physical Activity - 1 hr.
Orientation to the characteristics and activity needs of persons with disabilities. Does not fulfill teaching licensure requirement in Adapted Physical Education. (Variable)
420:148. Adapted Physical Activity Laboratory - 1 hr.
Instructional techniques and materials for adapting physical activity to meet the needs of persons with disabilities. Work may be selected from activities listed in the Schedule of Classes. May be repeated in different activities. Prerequisite or corequisite: $420: 147$ or equivalent. Does not fulfill teacher licensure requirement in Adapted Physical Education. (Variable) 420:151. Applied Kinesiology - 3 hrs.
Application of principles of mechanics to body movement. Discussion, 2 periods; lab, 2 periods. Prerequisite: 420:050 or equivalent. (Offered Fall and Spring)
420:152(g). Adapted Physical Education - 3 hrs.
Recognition of postural deviations; exercises for specific body parts; understanding specific disabilities; first aid and emergency care; and the modification of physical activities to meet limitations found in school populations. Prerequisites: 420:151; junior standing. Prerequisite or corequisite: 200:128. (Offered Fall and Spring)
420:153. Applied Exercise Physiology - 3 hrs.
Acute and chronic responses and adaptations of the physiological systems to muscular activity and training. Prerequisite: 420:050; junior standing. (Offered Fall and Spring)
420:154. Psychological Skills for Sport Participants - 2 hrs.
Understanding of psychological factors which affect performance in competitive sport. Survey of and individualized practice with psychological techniques designed to enhance sport performance. (Offered Fall and Spring)
420:156. Fitness Assessment and Programming - 3 hrs.
Assessment of fitness levels and application to fitness programming including remediation of dysfunction in rehabilitation. Prerequisite: 420:153.
(Offered Fall and Spring)

## 420:162. Foundations of Human Movement Study - 2 hrs.

Study of the human as a mover and the contributions of movement to quality of life. Categories of movement activities and their contribution to life throughout history. Philosophical foundations of movement-related roles and professions. (Offered Fall and Spring)
420:168. Assisting in Physical Education - 1 hr .
Assisting departmental instructor in activity classes. May be repeated once for credit. Prerequisite: consent of department. (Offered Fall and Spring)
420:173. Teaching Methods Block - 2 or 5 hrs.
Curriculum design, including movement education and wellness,
through the integration of instructional practices, teaching strategies, knowledge of adaptations to physical activity, and assessment practices. Laboratory experiences will be included in elementary, middle school, and high school levels. Prerequisites: Physical Education minor: 200:148; 420:021; 420:056. Physical Education Major-Teaching 200:148; 420:021; 420:053; 420:056; 420:174; 420:176. (Offered Fall and Spring)
420:174. Assessment Processes in Physical Education - 3 hrs.
Concepts of measurement and evaluation; statistical analysis; construction of evaluative instruments; and application of written and performance tests. Prerequisite or corequisite: 200:148. (Offered Fall and Spring)

## 420:176. Administration and Curriculum Development in Physical Education - 3 hrs.

Administration of programs in the elementary and secondary schools including budgeting, facilities, legal considerations, and support services. Design, development, and evaluation of curriculum content for grades K-12. Prerequisites: 200:148; 420:162. (Offered Fall and Spring)
420:185. Readings in Physical Education - 1-4 hrs.
Individual study in an area of physical education. Credit to be determined at time of registration and to be based on student's proposal. Primarily for majors and minors in Physical Education. Prerequisite: consent of department head. (Offered Fall, Spring, and Summer)
420:191. Senior Project - 1-6 hrs.
Individualized study and experiential learning under the supervision of qualified faculty and professionals in the field. Prerequisite: consent of instructor. (Offered Fall, Spring, and Summer)
420:193. Research Experiences - 1-6 hrs.
Conducting supervised research in a research team setting or mentoring setting with faculty, with presentation and publication of research as the goal. Topics for research may not duplicate a class project or the undergraduate thesis. May be repeated for maximum of 6 hours. Highly recommended for students planning to enter graduate programs. Prerequisites: sophomore standing; consent of instructor. (Offered Fall, Spring, and Summer)
420:194. Senior Thesis - 2-6 hrs.
Individualized research involving the selection of an area of inquiry; collection, analysis, and interpretation of data. Prerequisite: consent of instructor. (Offered Fall, Spring, and Summer)
420:197. Internship in Physical Education - 6-12 hrs.
Comprehensive practical experience in physical education in which the student applies course work in an agency commensurate with degree option. Offered on credit/no credit basis only. Prerequisites: completion of all course work in the option; current certification in Standard First Aid and Community CPR; consent of Internship Coordinator. (Offered Fall, Spring, and Summer)
420:198. Independent Study.
(Offered Fall, Spring, and Summer)

## 420:200. Computer Applications in Physical Education - 2 hrs.

Microcomputers and their use in physical education and sports medicine. Fundamentals of programming, data and file management, programmed communication, and survey of available software. Interactive computing for the use of major statistical programs. (Offered Fall)

## 420:222. Sport Psychology - 3 hrs.

Current sport psychology research and its relevance to coaches and athletes. Emphasis on the areas of sport personalogy, competitiveness, motivation, attention, self-concept, attitudes, competitive anxiety, and goal-setting. Stress management techniques and other psychological skills applicable to the sport setting. (Offered Fall)
420:230. Curriculum Theory and Design in Physical Education - 3 hrs.
Curriculum planning and development with emphasis on recent models for curricular decisions; selection and sequencing of developmentallyappropriate activities across the elementary, middle school, and high
school curricula. (Offered Fall)
420:231. Effective Teaching in Physical Education - 3 hrs.
Study of the skills and techniques that successful teachers use to maky classes appropriate and beneficial for students. Discussion of effectiv discipline, motivation, and planning techniques. Prerequisite: undery graduate methods class. (Variable)

## 420:251. Biomechanics - 3 hrs.

Application of mechanical principles and concepts to human movement emphasis on analysis of techniques employed in sports. Prerequisiten 420:050; 420:151; or equivalents. (Offered even Falls, even Springs)

## 420:253. Advanced Exercise Physiology - 3 hrs.

Process of scientific inquiry into exercise physiology and the identifical tion of basic principles to be applied for maximum performance withord injury. Discussion, 2 periods; lab, 2 periods. (Offered Fall)

## 420:255. Motor Control and Learning - 3 hrs .

Study and application of research findings to motor learning and the variables which influence it. (Offered odd Falls, odd Springs)
420:260. Laboratory Instrumentation and Test Interpretation - 2 hrs. Experience in exercise physiology laboratory instrumentation for cardiovascular, metabolic, muscular, and respiratory measurements as well as interpretation of test results. Prerequisite or corequisite: 420:253 or consent of instructor. (Offered Fall)
420:271. Cardiovascular Physiology - 3 hrs .
In-depth study of the functioning of the cardiovascular and respiratoty systems in the diseased and non-diseased state. Major topics include funch tional anatomy, cardiorespiratory control, arterial pressure, responses to exercise, electrical activity, and the effects of disease processes. (Same as 410:271) (Offered Fall)

## 420:273. Contemporary Issues in Physical Education - 3 hrs.

Examination and analysis of continuing concerns and issues in the prom fession. (Offered Spring)

## 420:274. Measurement and Evaluation in Physical Education - 3 hrs.

Historical background of measurement in physical education; evaluationt as a part of teaching; statistical techniques; construction and use of motor and knowledge tests; criteria for test selection; administering a testind program; interpretation and use of test results. (Variable)

## 420:285. Readings in Physical Education - $\mathbf{1 - 4}$ hrs.

(Offered Fall, Spring, and Summer)

## 420:209. Seminar in Physical Education - 1-3 hrs.

Special topics as indicated in the Schedule of Classes. May be repeated for credit. (Offered Fall, Spring, and Summer)

## 420:293. Research Experience in Physical Education - 1-2 hrs.

Research on problems other than those for the thesis or in regular course offerings. May be repeated for maximum of 6 hours. Prerequisite: consenti of instructor. (Offered Fall, Spring, and Summer)

## 420:295. Internship in Physical Education - 1-4 hrs.

Experience in physical education programs with agencies other than in higher education. Prerequisite: consent of Graduate Advisor. (Offered Fall, Spring, and Summer)

## 420:297. Practicum - 1-4 hrs.

Practical experience in teaching physical education at the college level May be repeated for credit. Prerequisite: consent of Graduate Advisora (Offered Fall, Spring, and Summer)

## 420:299. Research.

Fee assessed separately for laboratory materials and/or binding of thesis/ research paper. (Offered Fall, Spring, and Summer)

## 42T Athletic Training

42T:023. Introduction to Athletic Training - 2 hrs.

Introduction to field of athletic training with emphasis on the history of the National Athletic Training Association, certification guidelines, policies and procedures, risk management, roles and responsibilities of athletic trainers, and common illnesses and injuries. (Offered Spring) 42T:024. Introduction to Athletic Training Clinical Experience - 1 hr .
Didactic and psychomotor skill instruction with practical examinations covering the material taught in 42T:023. Corequisite: $42 \mathrm{~T}: 028$. (Offered Summer)
42T:028. Clinical Anatomy - 3 hrs.
Clinical anatomy of the human body which includes palpation, range of motion assessments, manual muscle testing, neurological testing, and structure identification. Prerequisites: 42T:023; admission into the athletic training program. Corequisite: 42T:024. (Offered Summer)
42T:033. Emergency Care in Athletic Training - 2 hrs.
Theory, ethics, components, indications, and psychomotor skills of emergency care in athletic training. Prerequisites: 42T:023; 42T:024; admission into the athletic training program. Corerequisite: 42T:034. (Offered Fall) 42T:034. Emergency Care in Athletic Training Clinical Experience - 1 hr . Didactic and psychomotor skill instruction with practical examinations covering the material taught in 42T:033. Prerequisites: 42T:023; 42T:024; admission into the athletic training program. Corequisite: 42T:033. (Offered Fall)

## 42T:110. Athletic Training Administration — 2 hrs.

Theoretical and practical study of organization and administration in the field of athletic training. Prerequisites: 42T:023; 42T:024; admission into the athletic training program. (Offered Fall)
42T:134. Upper Body Injury Assessment - 2 hrs.
Recognition and evaluation of athletic injuries occurring to the head, face, vertebral column, shoulder, forearm, wrist, and hand. Prerequisites: 42T:023; 42T:024; 42T:028; admission into the athletic training program. Corequisite: 42T:135. (Offered Fall)
42T:135. Upper Body Injury Assessment Clinical Experience - 1 hr.
Didactic and psychomotor skill instruction with practical examinations covering the material taught in 42T:134. Prerequisites: 42T:023; 42T:024; 42T:028; admission into the athletic training program. Corequisite: 42T:134. (Offered Fall)

## 42T:137. Lower Body Injury Assessment - 2 hrs.

Recognition and evaluation of athletic injuries occurring to the hip, pelvis, thigh, knee, leg, and ankle. Prerequisite: 42T:110. Corequisite: 42T:138. (Offered Spring)
42T:138. Lower Body Injury Assessment Clinical Experience - 1 hr.
Didactic and psychomotor skill instruction with practical examinations covering the material taught in 42T:137. Prerequisites: 42T:028; $42 \mathrm{~T}: 110$. Corequisite: 42T:137. (Offered Spring)

## 42T:143. Therapeutic Modalities - 2 hrs .

Effects, advantages, disadvantages, indications, contraindications, precautions, and the application parameters of therapeutic modalities in injury rehabilitation of the physically active. Prerequisites: 42T:023; 42T:024; 42T:028; admission into athletic training program. Corequisite: 42T:144. (Offered Fall)
42T:144. Therapeutic Modalities Clinical Experience - $1 \mathbf{h r}$.
Didactic and psychomotor skill instruction with praçtical examinations covering the material taught in 42T:143. Prerequisites: 42T:023; 42T:024; 42T:028; admission into athletic training program. Corequisite: 42T:143. (Offered Fall)

## 42T:157. Therapeutic Exercise - 2 hrs.

Effects, advantages, disadvantages, indications, contraindications, precautions, and the application parameters of therapeutic exercises in injury rehabilitation. Prerequisites: 42T:028; 42T:143; 42T:144. Corequisite: 42T:158. (Offered Spring)

42T:158. Therapeutic Exercise Clinical Experience - 1 hr .
Didactic and psychomotor skill instruction with practical examinations covering the material taught in 42T:157. Prerequisites: 42T:028; 42T:143; 42T:144. Corequisite: 42T:157. (Offered Spring)
42T:162. Athletic Training Pharmacology - 2 hrs.
Effects, indications, and contraindications of therapeutic medications as related to the prevention and care of athletic injuries of the physically active. Prerequisites: 42T:110; 420:153. (Offered Spring)
42T:170. Athletic Training Pathology - 3 hrs.
Study of the pathology of orthopedic injuries and conditions that are commonly seen by certified athletic trainers. Prerequisite: 42T:110. (Offered Spring)
42T:175. General Medical Conditions - 3 hrs .
Study of general medical conditions and disabilities commonly seen by certified athletic trainers. Prerequisites: 42T:110; junior standing. (Offered Fall)
42T:178. Current Trends in Athletic Training - 2 hrs.
Discussion of current topics and trends in the clinical practice and professional development of athletic training. Prerequisite: 42T:110. (Offered Fall)
42T:180. Athletic Training Seminar - 2 hrs.
Resume writing, interviewing, and a comprehensive review of the athletic training educational competencies. Prerequisites: 42T:110; senior standing. (Offered Spring)

## 42T:210. Pathoetiology and Orthopaedic Assessment I - 2 hrs.

In-depth study of pathological, etiological, and neuromuscular mechanisms of musculoskeletal injuries with emphasis on advanced orthopaedic assessment techniques of the upper body. Prerequisites: NATABOC certification; admission into the athletic training graduate program. (Offered Fall)
42T:220. Pathoetiology and Orthopaedic Assessment II - 2 hrs.
In-depth study of pathological, biomechanical, and neuromuscular mechanisms of musculoskeletal injuries with emphasis on advanced orthopaedic assessment techniques of the lower body. Prerequisites: NATABOC certification; admission into the athletic training graduate program. (Offered Spring)
42T:230. Evidence Based Rehabilitation Practice I-2 hrs.
In-depth analysis of current literature, research, case studies, and therapeutic techniques directed toward the rehabilitation of musculoskeletal injuries to the upper body of the physically active. Prerequisites: NATABOC certification; admission into the athletic training graduate program. (Offered Spring)

## 42T:240. Evidence Based Rehabilitation Practice II - 2 hrs .

In-depth analysis of current literature, research, case studies, and therapeutic techniques directed toward the rehabilitation of musculoskeletal injuries to the lower body of the physically active. Prerequisites: NATABOC certification; admission into the athletic training graduate program. (Offered Fall)
42T:250. Orthopaedic Surgical Interventions - 2 hrs.
Study of orthopaedic surgical interventions commonly performed for musculoskeletal injuries suffered by the physically active. Prerequisites: NATABOC certification; admission into the athletic training graduate program. (Offered Spring)

## 42T:260. Current Topics in Athletic Training - 2 hrs.

Discussion of current and future trends in the allied health profession of athletic training. Prerequisites: NATABOC certification; admission into the athletic training graduate program. (Offered Fall)
42T:270. Administration and Leadership in Athletic Training - 2 hrs .
Theoretical and applied techniques for organizing, administrating, and leading athletic training health care programs in various clinical settings. Prerequisites: NATABOC certification; admission into the athletic training graduate program. (Offered Spring)

## 430 Leisure, Youth and Human Services

430:010. Introduction to Leisure, Youth and Human Services - 3 hrs.
Introduction to leisure, youth and human services profession, including history, philosophy, trends, and opportunities. Examination of the components of LYHS delivery systems, focusing on programs and services, facilities, populations served, and sources of funding. Field trips required. (Offered Fall and Spring)

## 430:020. Leadership in Leisure, Youth and Human Services - 3 hrs.

Theories, principles, and practices of leisure, youth and human services leadership; techniques and methods of working with individuals and groups. (Offered Fall and Spring)
430:030. Diversity in Leisure, Youth and Human Services - 3 hrs.
Overview of interaction of leisure services and the elements of diversity including race/ethnicity, gender, age, sexual orientation, and ability/ disability. (Offered Fall and Spring)
430:050. Principles of Outdoor Recreation - 3 hrs.
Overview of development, implementation, and evaluation of outdoor recreation programs. Examination of benefits and challenges of outdoor recreation, with focus on outdoor leadership competencies. Prerequisite: consent of Focus Area Advisor. (Offered Fall)
430:110. Programming for Leisure, Youth and Human Services - 3 hrs.
Introduction to methods and procedures for planning, budgeting, implementing, and evaluating leisure, youth and human service programs. Prerequisites: 430:010; 430:020. (Offered Fall and Spring)
430:114. Management of Leisure, Youth and Human Services - 3 hrs.
Introduction to factors of managing leisure, youth and human services. Focus on personnel management, legal foundations, policy formulation, budgeting and finance, and organizational behavior. Prerequisites: 430:010; 430:020. (Offered Fall and Spring)

## 430:121. Philosophical Foundations of Leisure, Youth and Human

Services - $\mathbf{3}$ hrs.
Examination of historical and philosophical foundations of leisure, youth and human services, including leisure behavior and societal issues, implications of working with special populations, leisure and the environment, and 'application of theories and behavioral concepts required to understand and manage services, activities, and environments. (Offered Fall and Spring)
430:123. Foundations of Therapeutic Recreation - 3 hrs.
History, philosophy, and theories of therapeutic recreation; professionalism; factors influencing service delivery. (Offered Fall and Spring)
430:130(g). Theory and Practice of Experiential Education - 3 hrs .
Theory, history, philosophy, and practice of experiential education. Focus on application in outdoor/adventure settings. Field trip(s) required. Prerequisites: consent of Focus Area Advisor; junior standing. Prerequisite or corequisite: 430:050. (Offered Spring)

## 430:140(g). Camp Staff Development - 2 hrs.

Staff development and program planning principles, methods, and procedures used in the development of camp services. Lecture and lab. Offered on credit/no credit basis only. May be taken for credit for the first 2 hours, subsequent enrollment as audit only. Prerequisite: junior standing. (Offered Spring)

## 430:141(g). Field Experience in Camp Counseling - 1-6 hrs.

Supervised counseling experience in an organized camp. May be repeated for maximum of 12 hours. Offered on credit/no credit basis only. Prerequisite: junior standing. (Offered Summer)
430:143. Trends and Issues in Outdoor Recreation - 3 hrs.
Theory and practical application of current issues, concerns, and trends as they relate to the field of outdoor recreation. Prerequisites: 430:050; consent of Focus Area Advisor. (Offered Fall)

## 430:144(g). Camp Management Systems - 2 hrs.

Actual administration of a camp program. Includes personnel superv sion, program implementation, and evaluation of camp system. Lectur and lab. May be repeated for a maximum of 6 hours. Offered on credit/nut credit basis only. Prerequisite: junior standing. (Offered Fall and Spring] 430:146(g). Managing Recreation Impacts on the Natural Environment
-3 hrs .
Comprehensive study of theories, philosophies, methods, and planniny strategies used to facilitate efficient and effective management of natur resources for appropriate use by outdoor recreation visitors. Prereque sites: 430:050; junior standing; consent of Focus Area Advisor. (Offerel Spring)

## 430:160 (g). Assessment, Programming and Evaluation in Therapeutic

Recreation - 3 hrs.
Methods and techniques used in providing therapeutic recreation to persons with disabilities. Includes field experience. Prerequisites: $31 \mathrm{~F}: 05$, 430:123; verified First Aid and CPR certification; junior standing. Corec uisite: 430:167. (Offered Fall)
430:163. Administrative Practices in Therapeutic Recreation - 3 hrs.
Knowledge and techniques for management of therapeutic recreation including legal and financial problems, utilization of human resources, and development of public relations. Prerequisites: 430:123; 430:160; 430:167 (Offered Spring)

## 430:165(g). Leisure, Youth and Human Services Field Experience -

1-6 hrs.
Supervised observation and leadership experience in a designated LYHS program area. May be repeated for maximum of 12 hours. Offered on credit/no credit basis only. Prerequisite: junior standing. (Offered Fall, Spring, and Summer)
430:167. Intervention Techniques in Therapeutic Recreation - 3 hrs.
Appropriate activity, leadership, and adaptation techniques. Includes field experience. Prerequisites: 31F:055; 430:123. Corequisite: 430:160 (Offered Fall)
430:168(g). Areas and Facilities for Leisure, Youth and Human Services -3 hrs.
Planning, designing and managing park, recreation and leisure settings) areas, and facilities. Prerequisites: 430:110 or consent of instructor; junio standing. (Offered Fall)

## 430:169. Research and Evaluation in Leisure, Youth and Human Services

 -3 hrs.Introduction to researç, evaluation, needs assessment concepts, procedures, and analyses in leisure, youth and human services. Prerequisite| 430:110. (Offered Fall and Spring)
430:172(g). Festivals and Special Events Management - 3 hrs.
Exploration of special events and festivals including their contributiont to enhancing the quality of life for local residents and tourists. Study of when, where, why, and how such events are created, planned, and financed; why they are effective. Field trips required. Prerequisite: junio standing. (Offered Spring)

## 430:183. Professional Leadership Practicum - 2 hrs.

Practical experience in professional leadership, requiring students to develop, implement and evaluate a peer-advising program. Provides multiple opportunities for students to be significantly involved in the work of the Division of LYHS and the LYHS profession. Prerequisites: junior standing; consent of instructor. (Offered Fall and Spring)

## 430:184. Senior Project - 1-3 hrs.

Programming, resource, or research project to be completed during internship. Written report and oral presentation required after the comple tion of internship. LYHS majors must register for 3 hours. Prerequisite: consent of Internship Coordinator. Corequisite: 430:187. (Offered Spring and Summer)

## 430:185. Readings in Leisure, Youth and Human Services - $1-3$ hrs.

Individual reading and literature review in an area of leisure, youth and human services. Credit to be determined at time of registration based on student's proposal. Prerequisites: junior standing; consent of instructor. (Offered Fall, Spring, and Summer)

## 430:187. Internship - 8-12 hrs.

Comprehensive practical experience in leisure, youth and human services. LYHS majors must register for 12 hours. Offered on credit/no credit basis only. Prerequisite: senior standing; consent of Internship Coordina-
tor. Corequisite: 430:184. (Offered Spring and Summer)
430:188(g). Professional Development Seminar - 2 hrs.
Professional development forum to explore professional preparation and professional practice issues in leisure, youth and human services, with emphasis on American Humanics Program. Presented through a unique series of activities that encourage critical analysis and self-exploration. May be repeated for maximum of 4 hours. Prerequisite: junior standing. (Offered Fall and Spring)
430:189. Seminar - 1-2 hrs.
Prepares students for internship and future employment in leisure, youth and human service organizations. Focus on development of professional documentation (portfolio, resume, etc.), skills, and internship placement. LYHS majors must register for 2 hours. Prerequisites: senior standing; consent of instructor. (Offered Fall and Spring)
430:201. Social Policy and lssues in Leisure, Youth and Human Services -3 hrs .
Examination and analysis of current trends and issues confronting practitioners in voluntary/not-for-profit, public, and commercial leisure, youth and human service agencies. (Offered Fall)

## 430:202. Social Psychology of Leisure, Youth and Human Services -

 3 hrs.Exploration of sociopsychological dimensions of leisure as they affect leisure, youth and human service practitioners and agencies, focusing on theories from sociology, psychology, and social psychology. (Offered Spring)
430:240. Historical and Philosophical Foundations of Leisure, Youth and Human Services - 3 hrs.
Historical and philosophical perspective for understanding leisure, leisure behavior, and professional practices in leisure, youth and human services. (Offered Fall)
430:250. Management Issues in Leisure, Youth and Human Services 3 hrs.
Study of management and administration issues in relation to leisure, youth and human service agencies. (Offered Spring)
430:260. Strategic Program Management - 3 hrs.
Examination of concepts and theories of program management in leisure, youth and human services, focusing on analysis of specific programming strategies as they relate to community organization theory using a systems approach. (Offered Fall)
430:285. Readings - 1-4 hrs.
(Offered Fall, Spring, and Summer)
430:291. Internship - 2-6 hrs.
Practical experience in leisure, youth and human services with community agencies. Prerequisite: consent of graduate committee. (Offered Fall, Spring, and Summer)

## 430:299. Research.

Fee assessed separately for laboratory materials and/or binding of thesis/ research paper. (Offered Fall, Spring, and Summer)
430:310. Critical Theories and Practices in Leisure, Youth and Human Services I- 3 hrs.
In-depth examination of current theories and practices relevant to the leisure, youth and human services fields. Building on foundational theory courses, students analyze and critique the organization and design of
leisure, youth and human service programs, based on setting and ideological model, in the U.S. and around the world. Students develop praxis design principles consistent with the developmental, normative focus of informal and formal education. Prerequisites: 430:020; 430:202; consent of instructor. (Variable)

## 430:312. Critical Theories and Practices in Leisure, Youth and Human <br> Services II - $\mathbf{3}$ hrs.

Second course in a two-course sequence that surveys leisure, youth and human service practices and theories in a wide variety of out-of-school and co-curricular settings. Students analyze and critique the organization and design of leisure, youth and human service programs, based on setting and ideological model, in the U.S. and around the world. Students develop praxis design principles consistent with the developmental normative focus of informal and formal education. Prerequisite: 430:310. (Variable)
430:329. Research and Evaluation Seminar - 1 hr .
One hour taken each semester for six semesters for total of 6 hours. Applied approach to research and evaluation. Students plan and implement research and evaluation projects in youth development, leisure, and/or human services settings, working with teams of faculty and other students. Course content includes research methods, statistics, and writing for publication. Prerequisite: doctoral standing or consent of instructor. (Offered Fall and Spring)

## 43T Tourism

## 43T:070. Principles of Tourism - 3 hrs.

Investigation of many roles travel and tourism play in contemporary society. Overview of the travel and tourism industry, examination of definitions of travel/tourism, and exploration of the history and development of tourism. (Offered Fall and Spring)
43T:075. Tourism and Leisure Services Promotion - 3 hrs.
Core concepts of tourism and leisure services marketing including promotion, management, philosophies, planning, environment, research, consumer behavior, and market segmentation. Presents promotion as a function of management, designed as tool to help sustain the industry. (Variable)
43T:170(g). Eco, Adventure and Sport Tourism - 3 hrs.
Study of special tourism such as eco, adventure and sport tourism. Dynamics of responsible tourist travel that conserves natural environments and sustains the well-being of local people. Definitions, objectives, and profiles of programs involved in eco-tourism, sport and adventure tourism. Field trips required. Prerequisite: 43T:070 or consent of instructor. (Variable)

## 43T:171. Rural Tourism Developmemt - 3 hrs.

Promotes student competencies that will enable them to assist rural communities in development of a rural tourism program through an organized planning process. Field trips required. Prerequisite: 43T:070 or consent of instructor. (Variable)
43T:173 Conferences, Expositions and Conventions in Tourism - 3 hrs.
Exploration of the field of conferences, expositions, and conventions and their niche in the tourism industry. Study of organizational logistics, program development, economic impact, meeting technology, legal issues, employment opportunities, and topics of current interest related to the field. Prerequisite: 43T:070 or consent of instructor. (Offered Fall)

## 43Y Youth and Human Service Administration

43Y:060. Principles of Nonprofit Youth Serving Agencies - 3 hrs.
Principles of the youth and human services profession, including history,
$43 Y$ Youth and Human Service Administration/440 Health, Physical Education, and Leisure Services, Interdepartmental/450 Social Work
philosophy, missions, scope of services, activities, and trends. Special emphases on the 13 affiliate agencies within American Humanics, Inc. umbrella. (Offered Fall and Spring)
43Y:150. Management of Nonprofit Youth Serving Agencies - 3 hrs.
Principles, problems, and practices of administration for nonprofit youth-serving agencies. Prerequisite: junior standing or consent of instructor. (Offered Fall)

## 43Y:151. Financial Administration for Nonprofit Youth Serving Agencies

 - 3 hrs .Theory and practice of budget development and control in nonprofit youth-serving agencies. Prerequisite: junior standing or consent of instructor. (Offered Fall)

## 43Y:154. Human Resource Development in Nomprofit Youth Serving

Agencies - 3 hrs.
Management and supervision of volunteers, staff, and board members in youth service agencies. Emphasis on nonprofit personnel practices and procedures. Prerequisite: junior standing or consent of instructor. (Offered Spring)

## 43Y:155. Planning Strategies in Nonprofit Youth Serving Agencies -

 3 hrs.Examination and evaluation of various planning models used in nonprofit youth agencies to meet the needs of youth. Emphasis on matching developmental needs to planning strategies and models. Prerequisite: junior standing or consent of instructor. (Offered Spring)

## 43Y:157. Introduction to Youth Development in LYHS - 3 hrs.

Historical and philosophical foundations of leisure, youth and human services. Survey of practices and values in relation to the growth of youth in leisure, youth and human service settings. Prerequisite: consent of instructor. (Offered Fall)

## $43 \mathrm{Y}: \mathbf{2 4 0}$. Models for Intervention With Youth - 3 hrs .

Develops understanding of the various models of intervention utilized by professionals who work with youth in youth-serving agencies. (Offered Spring)

## 43Y:244. Youth Development in Nonprofit Organizations - 3 hrs.

Examination of concepts and theories of youth development, as related to the design of programs and services for positive role development in nonprofit youth organizations. (Offered Fall)

## 43Y:251. Financial Decision Making for Youth/Human Service Agencies

 -3 hrs.Financial function of the nonprofit agency incorporating technical materials applicable to the decision-making role of the agency. (Offered Fall) 43Y:253. Fundraising and Grant Writing for Nonprofit Agencies - 3 hrs . Comprehensive study of various funding sources and the methodology of nonprofit organizations to secure resources. (Offered Spring)
43Y:254. Marketing the Youth/Human Service Agency - 3 hrs.
Marketing strategies in implementing the exchange relationship between nonprofit organizations and their constituents. (Offered Spring)
43Y:256. Personnel Management and Supervision in Youth/Human

## Services - $\mathbf{3}$ hrs.

Elements, processes, and dynamics of personnel management and supervision as it is applied to youth/human services organizations, with an emphasis on nonprofit agencies. (Offered Fall)

## 440 Health, Physical Education, and Leisure Services, Interdepartmental

## 440:010. Personal Wellness - 3 hrs.

Concepts of exercise science, nutrition, stress management, contemporary threats, and decision making. Assessment, application, and participation in lifetime fitness and skill activities. (Offered Fall, Spring, and Summer)

## 440:045. Health and Physical Education for Elementary Teachers -

3 hrs .
Methods and materials in health education and physical education ap-s propriate for children. No credit for students with credit in 410:135 or 420:045. No credit given to Physical Education majors or minors. Prered uisite: 200:030. (Offered Fall and Spring)
440:120. Technology Integration for the HPELS Professional - 2 hrs.
Introduction to computer terminology, technology, communication and information systems. Integration of appropriate technology into profer sional settings within health, physical education and leisure servicel Students should have competency in basic computing skills (e.g., intro-1 ductory level workshops offered by the Center for Educational Technoli] ogy, or equivalent). Prerequisite: declared HPELS major (41x, 42x, 43x), (Offered Fall and Spring)
440:210. Quantitative Methods in HPELS - 3 hrs.
Practical statistical applications commonly used in health, physical education, leisure and exercise science with a focus on the analysis and interpretation of data through the use of computer software packagen Prerequisite: 250:180 or equivalent (Offered Fall and Spring)
440:215. Qualitative Methods in HPELS - 3 hrs.
Application of qualitative methods of data collection and analysis to top- ics in athletic training, health promotion and education, physical educas tion, leisure, and youth, and human services. Prerequisite: 220:293 or equivalent. (Variable)
440:290. Research Methods for Health, Physical Education and Leisure
Services - 3 hrs.
Introduction to processes of research in physical education, emphasis on critical analysis of literature, and identification of viable research project (Offered Fall and Spring)

## 450 Social Work

450:041. Social Welfare: A World View - 3 hrs.
Comparative study of social welfare (social insurance, public welfare, charity and philanthropy, social services, and mutual aid) in the United States, and selected nations from five regions of the world as defined by the International Congress of Schools of Social Work (African, Asian European, Latin American, and North American regions). (Same as 900:041) (Offered Fall and Spring)

## 450:042. Social Services and Social Work - 3 hrs.

Legal aspects, goals, and values of the social work profession, and roles of the social worker in social service agencies. Prerequisite: $450: 041$ or consent of instructor. (Offered Fall and Spring)
450:045. American Racial and Ethnic Minorities - 3 hrs.
Survey of several American minorities, including Hispanics, Blacks, Asians, and Native Americans. Multi-disciplinary study of these groups with particular emphasis on geographic origins, linguistic traditions and current modes of economic subsistence. Introduction to folkways and mores of each group. (Same as 900:045 and 980:045) (Offered Fall and Spring)

## 450:080. Statistics for Social Work - 3 hrs.

Data-analytic techniques appropriate to social work research. Reasons to learn statistics, measures of central tendency, measures of dispersion and variability, levels of measurement, frequency tables and histograms, percentiles, Z-scores, inferential statistics, p -values, confidence intervals, Type 1 and Type II errors, chi-square, Pearson, Spearman, and point bi-serial correlations, shared variance, one-way ANOVA, multi-way ANOVA, linear regression, ANCOVA. Introduction to LISREL and basic epidemiological analyses including incidence, prevalence, relative risk, and odds-ratio. Prerequisite: completion of mathematics requirement for the Liberal Arts Core. (Offered Spring)

450:091. Social Work Practice I-3 hrs.
Analysis of the principal social work methods - casework, group work, and community organization. Prerequisites: 450:041; 450:042 (may be corequisite); or consent of instructor. (Offered Fall and Spring)
450:102. Conflict Resolution - 3 hrs .
Survey of social science theory and research in conflict resolution with emphasis on development of less destructive modes of problem solving in social formations. (Same as 980:102 and 990:102) (Variable) $450: 121(\mathrm{~g})$. Mental Deviance and Mental Health Institutions - 3 hrs.
Study of social factors associated with mental illness, its onset, the organizational context of its care and treatment, and its effects on various societal institutions. Prerequisites: 980:060; junior standing. (Same as 980:121g) (Variable)
450:142(g). Working With Racial and Ethnic Minorities - 3 hrs.
Examination of values and behaviors related to ethnic group membership and social class. Utilization of such knowledge for problem assessment and intervention. Development of ethnic-sensitive practice skills. Prerequisites: 450:041; junior standing. (Variable)

## 450:143(g). Stress and Stress Management in the Helping Professions -3 hrs.

Stress and stress management for helping professionals and their clientele. Physiological, psychological, social, and economic factors producing stress. Coping, management, and prevention procedures. Prerequisite: junior standing. (Variable)
450:144(g). Social Policies and Issues - 3 hrs .
Policy development and the consequences of policy for social welfare institutions. Frameworks for policy analysis. Planning, program design, and policy decisions for administration of social services. Prerequisites: 450:041; 450:042; senior standing. (Offered Fall and Spring)
450:163(g). Minority Group Relations - 3 hrs.
Study of interpersonal and social relations of minority groups within the larger American society, with special reference to Black-White relations. Prerequisites: 980:001; junior standing. (Same as 980:130g) (Offered Fall and Spring)
450:164(g). Human Behavior and the Social Environment - 3 hrs.
Assessment of applicability of various perspectives of human behavior to social work diagnosis, planning, and intervention; general systems theory serves as organizing framework. Student should have a strong base of courses in human behavior. Prerequisites: 31F:055 or 400:120; 840:014 or a course in biology; junior standing. (Offered Fall and Spring)
450:171(g). Addictions Treatment - 3 hrs .
Social, legal, political, and ethical considerations surrounding the use and abuse of alcohol and other drugs. Study of eating disorders and nonsubstance addictions such as shopping and gambling. Theories of causes and survey of social consequences; various intervention models tested in treating the alcoholic/addict and evaluation of the effectiveness of the treatment approaches. Prerequisite: junior standing. (Variable)
450:172(g). Human Services Administration - 3 hrs.
Major concepts, principles, methods, and theories of administration of human services agencies, public and private. Application of systems theories to administration of these agencies. Prerequisites: 450:041; junior standing. (Variable)
450:173(g). Social Services for the Aged - 3 hrs.
Social work practice and methods of delivering social service to the aged; critical analysis of current social programs, services, and legislation for the elderly person. Prerequisites: 450:041; junior standing. (Variable)
450:174(g). Social Services in Health Care Settings - 3 hrs.
Psychosocial impacts of illnesses; roles and responsibilities of health care personnel. Prerequisites: 450:041; junior standing. (Variable)
450:175(g). Child Welfare Policy and Practice - 3 hrs.
Review of development of family and children's services and practice, focusing on current services, programs, and social work practice issues.

Examination of policies and legislation, emphasizing how such policies affect family functioning and the delivery of services. Prerequisites: 450:041; junior standing. (Variable)

## 450:184. Field Instruction - 11-15 hrs.

440 clock hours required. Eleven credit hours may be earned by: (1) 3-1/2 days per week on a semester basis; or (2) full-time for eleven weeks during a semester; or (3) full-time for eleven weeks during the summer. Additional credit hours will require additional clock hours in field instruction. Offered on credit/no credit basis only. Prerequisites: 450:042; 450:164; 450:185 and a statistics course; completion of $450: 091$ and $450: 192$ with a minimum grade of $C$ in each course; Social Work major; minimum UNI GPA of 2.40; senior standing. (Offered Fall, Spring, and Summer)

## 450:185. Social Work Research - 3 hrs.

Application of research to social work practice including formulation of research questions and hypotheses, strategies of research design, measurement and methods of collecting data, questionnaire construction, data presentation, and report writing. Prerequisites: 800:023 or equivalent; 980:080; junior standing. (Offered Fall, Spring, and Summer)
450:189. Readings in Social Work - 1-3 hrs.
May be repeated only with consent of department. Prerequisites: 6 hours in social work; consent of department. (Offered Fall, Spring, and Summer)

## 450:190. Specialized Field Placement - $1-6$ hrs.

Specialized Field Placement can be designed to meet unique situations; beyond $450: 184$. Students may elect 1-6 hours credit; 40 clock hours equals 1 credit hour. Student may enroll for maximum of 18 credit hours in a combination of $450: 184$ and $450: 190$. Prerequisites: 450:192; minimum UNI GPA of 2.40. Enrollment by consent of the Field Coordinator only. (Offered Fall and Spring)
450:192. Social Work Practice II - 3 hrs.
Intermediate level, generic social work practice theory and skills, and task-centered intervention. Prerequisites: Social Work major; completion of $450: 091$ with a minimum grade of $C_{i}$ minimum UNI GPA of 2.40 . (Offered Fall and Spring)
450:193(g). Therapeutic Communication - 3 hrs .
Human communication relevant to effective behavior change in the therapeutic relationship. Experiential learning in the core therapist facilitative conditions. Identification of critical therapist-helping person-and client variables which affect communication. Prerequisites: 450:192; junior standing. (Offered Spring)

## 450:194(g). Seminar in Sociai Work - 3 hrs.

In-depth exploration of an advanced topic in social work practice or social welfare policy. May be repeated once on different topic. Prerequisites: junior standing; consent of instructor. (Variable)

## 450:195(g). Family and Group Practice - 3 hrs.

Family, family network, and group work intervention skills. Prerequisites: 450:192; junior standing. (Offered Fall and Summer)
450:196(g). Community and Organizational Practice - 3 hrs.
Advanced study of planned social change within communities and organizations. Emphasis on social welfare agency environments and issues. Prerequisites: 450:192; junior standing. (Offered Fall and Spring)

## 450:210. Foundation Practicum I - 3 hrs.

Practicum placement for first year M.S.W. students, fall semester. 150 clock hours required; concurrent with classes. Practicum established by arrangement with Department of Social Work Field Director. Offered on credit/no credit basis only. Prerequisite: admission to graduate program in Social Work or written consent of instructor. (Offered Fall)

## 450:211. Foundation Practicum II - 5 hrs.

Practicum placement for first year M.S.W. students, Spring semester. 250 clock hours required; concurrent with classes. Practicum established by arrangement with Department of Social Work Field Director. Offered on credit/no credit basis only. Prerequisite: 450:210. (Offered Spring)

450:212. Human Behavior and the Social Environment Micro - 3 hrs.
Overview of systemic factors that shape behavior across the life span of the individual with particular attention to diversity and oppressed populations. Examination of person-environment interactions as they relate to generalist social work. Prerequisite: admission to graduate program in Social Work or written consent of instructor. (Offered Fall)
450:213. Human Behavior and the Social Environment Macro - 3 hrs.
Integrates environmental systems as a framework for generalist social work practice. Emphasis on macro systems-groups, organizations, communities, and societal and global influences. Prerequisite: admission to graduate program in Social Work or written consent of instructor. (Offered Spring)

## 450:214. Social Work Practice I-3 hrs.

Introduces foundation core of the generalist social work practice approach. Develops practice skills in context of social work values and ethics. Prerequisite: admission to graduate program in Social Work or written consent of instructor. (Offered Fall)

## 450:215. Social Work Practice II - 3 hrs.

Builds on $450: 214$ addressing social work practice from a generalist perspective and includes mezzo-system knowledge and intervention skills for working with small groups and families. Prerequisite: 450:214. (Offered Spring)

## 450:216. Social Work Practice with Organizations and Communities 3 hrs.

Generalist social work practice model applied to macro systems: organizations and communities. Analysis of systems, macro practice issues, change strategies, impacts on human diversity populations at risk, and social and economic justice addressed in the context of social work values and ethics. Prerequisite: 450:214. (Variable)
450:218. Introduction to Social Work Research - 3 hrs.
Overview of basic concepts used by social workers in applied research. Enables students to read and understand social work research literature and conduct basic social work research. Prerequisite: admission to graduate program in Social Work or written consent of instructor and completion of a college level course in statistical methods. (Offered Fall)
450:219. Social Welfare Policy and Services - 3 hrs.
History and current patterns of social welfare policy and services. Analysis of policies and policy-making process. History and philosophy of social work profession. Role of policy in maintenance or attainment of optional health and well being and social and economic justice. Prerequisite: admission to graduate program in Social Work or written consent of instructor. (Variable)
450:230. Injustice and Oppression - 3 hrs.
Examination of the psychological, social, and economic genesis of the conditions, dynamics, and consequences of social and economic injustice. Social work commitment of advocacy in addressing social and economic injustice and institutionalized oppression. Prerequisite: admission to graduate program in Social Work or written consent of instructor. (Offered Summer)

## 450:239. Advanced Standing Graduate Seminar - 4 hrs.

Variable content covered in the first year of the program which is not typically addressed in accredited baccalaureate programs, and which prepares advanced standing graduate students for their entry into the second year of the M.S.W. program. Prerequisite: admission to graduate program in Social Work or written consent of instructor. (Offered Summer)

## 450:240. Advanced Micro Practice Practicum I - 5 hrs.

Fall semester practicum for second year M.S.W. Micro Practice concentration students. 250 clock hours required; concurrent with classes. Practicum established by arrangement with Department of Social Work Field Director. Offered on credit/no credit basis only. Prerequisites: completion of first year of M.S.W. program, or graduation from a Council on Social Work Education accredited undergraduate curriculum and completion
of all Advanced Standing courses in M.S.W. program. (Offered Fall and Summer)

## 450:241. Advanced Micro Practice Practicum II - 5 hrs.

Practicum placement for second year M.S.W. Micro Practice concentry tion students, spring semester or summer. 250 clock hours required; concurrent with classes or summer following second year classes. Practicual established by arrangement with Department of Social Work Field Direc, tor. Offered on credit/no credit basis only. Prerequisite: 450:240. (Offered Spring and Summer)

## 450:242. Approaches to Advanced Micro Practice - 3 hrs.

Advanced social work assessment, planning, intervention and evaluatiod skills, familiarity with selected social work assessment and interventiolil systems, including person-in-environment and strengths perspective and relevant research on practice. Prerequisites: completion of first year of M.S.W. program, or graduation from a Council on Social Work Education accredited undergraduate curriculum and completion of all Advanced Standing courses in M.S.W. program. (Offered Fall)
450:243. Advanced Social Work Practice with Groups - 3 ,hrs.
Application of knowledge of small group structure and dynamics to social work intervention using groups as a medium for individual chang and growth as well as facilitation of groups. Differential social work group practice with diverse populations. Prerequisites: Completion of first year of M.S.W. program, or graduation from a Council on Social Work Education accredited undergraduate curriculum and completion of all Advanced Standing courses in M.S.W. program. (Offered Fall)
450:244. Advanced Social Work Practice with Families - 3 hrs.
Development of advanced social work practice skills, techniques, and interventions with families, building on the core foundation of generalia social work practice. Special attention is given to culturally-diverse and rural families. Prerequisites: completion of first year of M.S.W. program or graduation from a Council on Social Work Education accredited undergraduate curriculum and completion of all Advanced Standing courses in M.S.W. program. (Offered Spring)

## 450:250. Advanced Social Work Research - 3 hrs.

Evaluation of direct social work practice and social service programs. Qualitative research methods; single system design, quantitative program evaluation; quasi-experimental design, the use of observation, interview-1 ing, participatory evaluation, and user-controlled evaluation. Prerequi sites: completion of first year of M.S.W. program, or graduation from a Council on Social Work Education accredited undergraduate curriculum and completion of all Advanced Standing courses in M.S.W. program. (Offered Fall)

## 450:255. Social Welfare Policy Analysis - 3 hrs.

Analysis of current social welfare policies and programs and the institutions designed to implement them. Overview of selected methods of policy analysis; detailed examination of one method of analysis. Prerequisites: completion of first year of M.S.W. program, or graduation from a Council on Social Work Education accredited undergraduate curriculum and completion of all Advanced Standing courses in M.S.W. program. (Offered Spring)
450:260. Advanced Social Administration Practicum I-5 hrs.
Practicum placement for second year M.S.W. Social Administration concentration students, fall semester. 250 clock hours, concurrent with dasses. Practicum established by arrangement with Department of Social Work Field Director. Offered on credit/no credit basis only. Prerequisites: completion of first year of M.S.W. program, or graduation from a Council on Social Work Education accredited undergraduate curriculum and completion of all Advanced Standing courses in M.S.W. program. (Offered Fall and Summer)
450:261. Advanced Social Administration Practicum II - 5 hrs.
Practicum placement of second year M.S.W. Social Administration concentration students, spring semester or summer block. 250 clock hours.

Practicum established by arrangement with Department of Social Work Field Director. Offered on credit/no credit basis only. Prerequisite: 450:260. (Offered Spring and Summer)

## 450:262. Administrative Social Work Practice - 3 hrs.

Development of skills to manage human service organizations. Organizational theory, strategic planning, board development, supervision and personnel management, budgeting and financial management, case management and collaboration, and cultural diversity. Prerequisites: completion of first year of M.S.W. program, or graduation from a Council on Social Work Education accredited undergraduate curriculum and completion of all Advanced Standing courses in M.S.W. program. (Offered Fall)
450:263. Grant Writing, Fund Raising, and Contracting - 3 hrs.
Securing funding for human service agencies and programs. Grant writing to private foundations and public agencies, fund-raising from individuals and corporations, planning and implementing comprehensive fund-raising programs, and developing service contracts. Prerequisites: completion of first year of M.S.W. program, or graduation from a Council on Social Work Education accredited undergraduate curriculum and completion of all Advanced Standing courses in M.S.W. program. (Offered Fall)
450:264. Organizational Development and Networking - 3 hrs.
Review of research literature on organizational development, examination of the processes and problems endemic to human service organizations, staff skill development, and networking. Prerequisite: 450:262. (Offered Spring)
450:280. Crisis Intervention - 3 hrs.
Introduction to the theoretical foundations and social work practice techniques of crisis intervention. Life events that often trigger crisis, coping mechanisms, and social work practice techniques. Prerequisite: $450: 214$ or completion of 450:239. (Variable)
450:281. Case Management - 3 hrs.
Examination of the current state of managed care in social service and health delivery systems. Accountability, continuity-of-care, assessing community resources, and computer applications to monitor case management activities. Prerequisite: 450:214 or completion of 450:239. (Variable)
450:285. Readings - 1-6 hrs.
Prerequisite: consent of instructor. (Offered Fall, Spring, and Summer) 450:289. Graduate Seminar in Social Work - 3 hrs.
Advanced, in-depth exploration of a topic in social work practice, policy, research, or knowledge. May be repeated once on a different topic. Prerequisites: completion of first year of M.S.W. program, or graduation from a Council on Social Work Education accredited undergraduate curriculum and completion of all Advanced Standing courses in M.S.W. program. (Variable)

## 48_Communication Studies

## 48C: (Communications)

48C:001. Oral Communication - 3 hrs .
Development of speaking and listening skills by studying the process and theory of communication and by applying communication principles to various speaking situations. (Offered Fall, Spring, and Summer)
48C:004. Interpersonal Communication - 3 hrs.
Study of communication in relationships; exploration and experience with concepts and processes involved in one-to-one communication. Prerequisite: 48C:001. (Offered Fall, Spring, and Summer)
48C:006. Current and Historical Issues in Communication - 3 hrs .
Overview of the discipline of communication, emphasizing contemporary social issues, contexts, and technology. Use of selected theories to generate critiques of specific communication events. Prerequisite: 48C:001. (Offered Fall and Spring)

## 48C:011. Oral Interpretation: Texts in Performance - 3 hrs.

Introduction to the performance, analysis, and criticism of literary and aesthetic texts. (Offered Fall and Spring)

## 48C:015. Interpreters Theatre: Directing and Scripting for Group <br> Performance - 3 hrs.

Introduction to basic forms of staging and adapting of literary and non-traditional texts for group presentation. Work in narrative theatre, compiled scripting, and ensemble performance. Prerequisite: 48C:011 or équivalent. (Offered Spring)
48C:024. Media Literacy - 3 hrs.
Development of the ability to critically analyze media messages by examining the techniques, technologies, and institutions that are involved in media production. (Offered Spring)
48C:031. Group Communication - 3 hrs.
Study of communication in groups; exploration and experience with concepts and processes involved in group communication. Prerequisite: 48C:001. (Offered Fall and Spring)
48C:071. Public Speaking - 3 hrs.
Teaches students to prepare, adapt, present, and critique a variety of speeches in a public setting. Prerequisite: 48C:001. (Offered Fall and Spring)
48C:074. Argumentation and Debate - 3 hrs.
Training in the basics of academic debate and policy analysis. Prerequisite: 48C:001. (Offered Fall)
48C:080. Introduction to Research Methods - 3 hrs.
Introduction to the process of research and inquiry across the discipline of communication studies. Includes the three units qualitative, quantitative, and rhetorical. Introduction to the normative expectations of the research process. Prerequisites: $48 \mathrm{C}: 001 ; 48 \mathrm{C}: 006$. (Offered Fall and Spring)
48C:091; 48C:191. Applied Forensics - 1 hr.
Credit for approved participation in competitive speech and debate activities. May be repeated for maximum of 4 hours. Prerequisite: consent of instructor. (Offered Fall and Spring)
48C:093; 48C:193. Applied Performance Studies - 1-2 hrs.
Credit for approved work in Performance Studies (e.g., participation in Interpreters Theatre, performance in community, campus, or festival settings; or related activity). May be repeated for maximum of 4 hours. Prerequisite: consent of instructor. (Offered Fall and Spring)
48C:108(g). Performance Texts and Contexts: Periormance and Social
Change - 3 hrs.
Study of creation and theory of interactive performances as a method to investigate political and social issues. Prerequisite: junior standing. (Offered Spring)

## 48C:110(g). Performance Texts and Contexts: Cultural Performance -

3 hrs.
Study of creation and theory in cultural contexts of personal, narrative, folk story, performances of identity in everyday life, ceremony, and ritual. Prerequisite: junior standing. (Offered Fall)
48C:113(g). Social Protest: Performance and Rhetoric - 3 hrs.
Study of rhetorical and performance texts as they function in social action, therapy, public awareness, identity formation, and rhetorical movements. Prerequisite: junior standing. (Variable)
48C:114(g). Public Folklore and Perfonmance - 2 hrs.
Cultural traditions, rituals, narratives, and celebrations within various communities. Exploration of applied research and performance projects for public awareness, education, and social action. Prerequisite: junior standing. (Variable)
48C:117(g). Interpreters Theatre Production - 1-2 hrs.
Advanced problems in preparing scripts and directing a group performance for public presentation. Usually involves directing, scripting, designing, or researching for an Interpreters Theatre production. Prerequi-
sites: 48C:015; approved Performance Studies project application; junior standing; consent of instructor. (Offered Fall and Spring)
48C:119(g). Readings in Performance Studies - 1-3 hrs.
Extensive individual study of special topics in performance studies theory, history, or research. Prerequisites: 48C:011; 48C:108 or 48C:110; junior standing. (Variable)
48C:120(g). Technology and Human Communication - 3 hrs .
Investigation of the interplay of technology and communication and the impact on social behavior, thought, and culture. Prerequisite: junior standing. (Formerly 48C:020) (Offered even Falls)

## 48C:121(g). Nonverbal Communication - 3 hrs .

Patterns of human_expression apart from the spoken or written word. Prerequisite: junior standing. (Same as 680:102g) (Offered Fall and Spring)

## 48C:122(g). Language and Communication - 3 hrs.

Communication and language theories, including discourse analysis, ethnography of speaking, conversation analysis, and language and social contexts. Prerequisite: junior standing. (Offered Fall and Spring)
48C:123(g). Rhetorical Theories - 3 hrs .
Survey of the development of rhetorical theory from classical times to the present. Exploration of what constitutes communication, what role it plays in social/political/cultural orders, how it differs between groups, and how it affects social change. Emphasis on classical to contemporary rhetorical theory or contemporary rhetorical theory. Prerequisite: junior standing. (Offered Spring)
48C:124(g). Communication Theories - 3 hrs.
Investigation of concepts offered by various theorists to explain human communication behavior. Prerequisite: junior standing. (Offered Fall and Spring)
48C:126(g). Critical Thinking in Communication - 3 hrs.
Exploration of practical application of thinking to facilitate and analyze effective communication behaviors. Prerequisites: 12 hours in communication; junior standing; consent of instructor. (Variable)
48C:128(g). Ethics in Communication - 2 hrs.
Exploration of ethical dimensions and dilemmas in the field of communication. Intended for graduating seniors. Prerequisite: senior standing. (Offered Spring)

## 48C:131(g). Advanced Group Communication - 3 hrs.

In-depth study of theories and research in group communications. Prerequisites: 48C:001; 48C:031; junior standing. (Offered Spring)
48C:132. Organizational Communication - 3 hrs .
Study of communication channels and patterns which occur in large organizations where personnel are largely interdependent. Prerequisite: $48 \mathrm{C}: 001$. (Offered Fall and Spring)
48C:134(g). Organizational Cultures and Communication - 3 hrs.
Study of how communication contributes to overall organizational culture. Special attention to interpretive and critical theory and research. Prerequisites: 150:153 or 48C:132; junior standing. (Offered Fall)
48C:135(g). Organizational Communication Assessment - 3 hrs.
Methods used to assess communication behavior and communication effectiveness in organizations. Special attention to communication auditing techniques, and creation of appropriate intervention techniques. Prerequisites: $48 \mathrm{C}: 132$; junior standing. (Offered Spring)
48C:136(g). Mediation Theory and Process - 3 hrs.
Analysis of mediation concepts and processes involving third party intervention in a conflict context. Prerequisites: 48C:004; junior standing. (Variable)
48C:138(g). Health Communication - 3 hrs.
Theories of communication in health care settings, current issues in health communication, types of applications in interpersonal, organizational, and public communication contexts; literature and performance methods in health education. Prerequisite: junior standing. (Offered Spring)

48C:139. Interviewing - 3 hrs.
Interviewer and interviewee functions in business and professional settings; excludes journalistic interviews. Prerequisite: No credit toward major for 48C:139 if credit in 48C:173. (Variable)

## 48C:141 (g). Listening - 2 hrs .

Study of theory and process of listening, methods of improving skills, and career applications. Prerequisite: junior standing. (Offered Fall and Spring)

## 48C:142(g). Family Communication - 3 hrs.

Theories of communication in traditional and alternative family systems| Examination of the role of verbal and nonverbal messages in the creationd and negotiation of family structures, meanings, decision making, conflict, and intimacy. Prerequisite: junior standing. (Offered Fall)
48C:144(g). Advanced Interpersonal Communication - 3 hrs.
Advanced study of theories and research in interpersonal communicad tion. Prerequisites: 48C:004; junior standing. (Offered Fall)
48C:146. Oral History Communication - 3 hrs.
Methods of researching, interviewing, analyzing, and presenting oral history materials. Applications for communication research and perforn mance, including public relations problems and campaigns, interpretay tion projects in museums and organizational settings. Prerequisite: junion standing. (Offered even Springs)
48C:148(g). Communication and Conflict Management - 3 hrs .
Exploration of the processes involved in managing conflict in various communication contexts. Prerequisites: 48C:004; junior standing. (Offered Spring)
48C:151(g). Intercultural Communication - 3 hrs.
Study of variables which affect the accuracy, depth, and success of crosscultural communication. Prerequisite: junior standing. (Offered Spring) 48C:153(g). Gender Issues in Communication - 3 hrs.
Examination of social construction of gender identities through verbal and non-verbal behaviors in daily interaction. Critical analysis of biological, sociological, and patriarchal explanations for presumed gender differences in communication. Prerequisite: junior standing. (Offered Fall)
48C:155(g). Communication, Community, and Change - 3 hrs.
Study of communication practices in the construction, enhancement, and maintenance of communities. Theory and application in case studies of specific communities. Prerequisite: junior standing. (Offered odd Springs)
48C:160(g). Political Communication - 3 hrs.
Study of the elements of national and/or local political communication, including the rhetoric of political campaigns, and/or the rhetoric of elected officials. Prerequisite: junior standing. (Offered even Falls)
48C:166(g). Selected Topics in Communication - 3 hrs.
Intensive work in specialized communication concepts, processes and approaches. No single emphasis may be repeated although the course may be repeated for maximum of 6 hours. Prerequisite: junior standing. (Variable)
48C:168(g). Message Design and Delivery - 3 hrs.
Advanced course which teaches students to prepare, adapt, and deliver messages in a variety of public settings. Special attention is paid to integrating presentation technology into the speech communication process. Prerequisites: 48C:001; 48C:071; junior standing. (Variable)

## 48C:172. U.S. Public Address - 3 hrs.

Training of students in critical skills used to analyze public discourse of the U.S., including the methods of textual, biographical, and analogical criticism. Emphasis on historical public address to 1925 or contemporary public address. (Variable)

## 48C:173. Business and Professional Oral Communication - 3 hrs.

Exploration of theories and experiences in business and professional dyadic, small group, and public communication situations, with emphasis on developing individual communication skills and professionalism.

Prerequisites: 48C:001; no credit toward major for 48C:173 if credit in 48C:139. (Offered Fall and Spring)
48C:174 (g). Argumentation: Cases and Studies - 3 hrs.
Analysis of selected cases and theories of argumentation. Emphasis on standards of ethics, logic, and evidence as aspects of argument. Prerequisite: junior standing. (Offered odd Springs)
48C:176(g). Freedom of Speech - 3 hrs.
Development of laws and social attitudes that have attempted to regulate communication in the United States; relation of free speech to national security, to regulation of the public forum, and to artistic expression; analysis of doctrines and tests used by the Supreme Court in interpreting the limits to free expression. Prerequisite: junior standing. (Variable)
48C:178(g). Persuasion - 3 hrs.
Examination of relationships between communication and change in belief/action patterns. Prerequisite: junior standing. (Variable)
48C:179. Cooperative Education - 1-6 hrs.
(Offered Fall, Spring, and Summer)
48C:180(g). Quantitative Research Methods - 3 hrs.
Examination of principles and procedures of communication research with emphasis on experimental and survey methods and techniques. Students will complete research projects. Prerequisite: junior standing. (Offered Fall and Spring)

## 48C:183(g). Qualitative Research Methods - 3 hrs.

Examination of principles and procedures of communication research with emphasis on interpretive and ethnographic techniques. Students complete research projects. Prerequisite: junior standing. (Offered Fall and Spring)
48C:184(g). Teaching the Oral Component of Language Arts - 2 hrs.
Study of process of communication as it relates to children's speaking and listening skill development; examination and development of teaching strategies and resources for teaching oral communication skills at elementary level. Prerequisites: junior standing; consent of instructor. (Variable)
48C:187(g). Teaching of Speech - 3 hrs.
Teaching strategies for grades 7-12; application of educational principles to the communication classroom. Credit also as a course in education for a student whose major is speech. Strongly recommended to precede student teaching. Prerequisites: 12 hours of speech; junior standing. (Offered Fall)
48C:188(g). Methods of Directing Forensics - 2 hrs.
Exploration of strategies for successfully directing a competitive speech and debate program. Credit also as a course in education for a student whose major is speech. Prerequisite: junior standing. (Offered Spring)
48C:189(g). Rhetorical Communication Research Methods - 3 hrs .
Examination of principles and procedures of rhetorical criticism. Students complete research projects. Prerequisite: junior standing. (Offered odd Springs)
48C:191. Applied Forensics - 1 hr. (See 48C:091)
(Offered Fall and Spring)
48C:193. Applied Performance Studies - 1-2 hrs. (See 48C:093)
(Offered Fall and Spring)
48C:195. Senior Seminar in Communication - $1 \mathbf{h r}$.
Students prepare a resume and a portfolio of their best work for review by faculty and communication professionals. Intended for graduating seniors. Prerequisites: completion of 24 hours of $48 \mathrm{C}: x 0 x$ course work; senior standing. (Offered Fall and Spring)

## 48C:197(g). Internship in Communication - 1-6 hrs.

Intensive work in specialized area at an off-campus work facility. May be repeated for maximum of 6 hours. Prerequisites: junior standing; consent of intern advisor and department head. (Offered Fall, Spring, and Summer)

48C:201. Introduction to Graduate Study and Research - 3 hrs .
Exploration of communication research methodologies and resources. (Offered Fall)

## 4BC:212. Seminar in Performance Studies - 3 hrs.

Various topics offered with specific title indicated in Schedule of Classes. May be repeated more than once on different topic. (Variable)
48C:222. Seminar in Communication - 3 hrs.
Various topics offered with specific title indicated in Schedule of Classes. May be repeated more than once on different topic. (Variable)

## 48C:224. Communication Theory - 3 hrs.

In-depth exposure to historical and contemporary scholarship that informs and constitutes theories of communication. Interdisciplinary with focus on social scientific and critical research on human communication, media studies, and rhetorical and performance theories. (Offered Spring)

## 48C:232. Seminar in Organizational Communication - 3 hrs .

Various topics offered with specific title indicated in Schedule of Classes. May be repeated more than once on different topic. (Offered Fall)
48C:236. Communication Research Methodology - 3 hrs.
Introduction to various research methods used in the study of communication. May be repeated for maximum of 9 hours if section is different. Prerequisite: graduate standing. (Offered Fall and Spring)

## 48C:236-01 Quantitative Methods.

Introduction to the quantitative methods employed in the study of communication, including experimental and survey techniques.

## 48C:236-02 Qualitative Methods.

Introduction to the qualitative research methods employed in the study of communication, including interpretive and ethnographic techniques.
48C:236-03 Critical Methods.
Introduction to the elements of critical, rhetorical, and performance methods, as well as alternative methods of textual criticism, and analysis and preparation of examples of textual criticism.
48C:244. Interpersonal Communication - 3 hrs.
Synthesis of psychological, sociological, philosophical analysis of person-to-person communication. (Offered Spring)
48C:282. Seminar in Communication Education - 3 hrs.
Various topics offered with specific title indicated in Schedule of Classes. May be repeated more than once on different topic. (Offered Fall)
48C:291. Projects in Communication Studies - 1-3 hrs.
May be repeated for maximum of 3 hours. Consent of departmental committee must be obtained before registration. (Variable)
48C:292. Graduate Internship - 2-3 hrs.
Experiential learning appropriate for the student" model program of study in the master of arts in communication curriculum. Prerequisites: fully admitted into the graduate program; completion of 12 hours of graduate course work in the department; permission of faculty advisor who will determine any other prerequisite courses. (Offered Fall, Spring, and Summer)
48C:299. Research.
(Offered Fall, Spring, and Summer)

## 48E: (Electronic Media)

48E:003. Introduction to Electronic Production - 3 hrs .
Introduction to audio and video production theories and techniques. Emphasis on gaining an understanding of production terminology, a mastery of basic production techniques, and comprehension of the information these communicate to an audience. (Offered Fall and Spring) 48E:011. Audio Production: (Topic) - 1-6 hrs.
Advanced theory and practice of producing audio programming for a variety of areas. Topics indicated in Schedule of Classes. May be repeated for maximum of 6 hours if topic is different. Prerequisites: 48E:003; 48E:071. (Offered Fall and Spring)

## 48E:013. Video Production: (Topic) - 1-6 hrs.

Advanced theory and practice of producing video programming for a variety of areas. Topics indicated in Schedule of Classes. May be repeated for maximum of 6 hours if topic is different. Prerequisites: 48E:003; 48E:071. (Offered Fall and Spring)

## 48E:021. Electronic Media Literacy - 3 hrs.

Development of ability to read television; a basic knowledge of how and why media images are selected, in order to foster a more dynamic relationship between citizens and media. Prerequisite: 48):002. (Offered Fall and Spring)

## 48E:071. Beginning Writing for Electronic Media - 3 hrs.

Techniques and script styles used in writing copy, continuity, and programs for radio and television. Prerequisite: 48):002. (Offered Fall and Spring)
48E:073. News Writing for Electronic Media - 3 hrs.
Principles and practice of writing, editing, and compiling news for electronic media. Prerequisite: 48):007. (Variable)
48E:091; 48E:191. Applied Electronic Media - 1 hr.
Credit available for qualified students who work on campus radio station, KGRK, and/or on other authorized radio/TV/film projects. May be repeated for maximum of 4 hours. Prerequisite: consent of instructor. (Offered Fall, Spring, and Summer)
48E:111. Audio Practicum: (Topic) - 1-6 hrs.
Production of a weekly audio program, with students filling the roles of all production staff. Topics indicated in Schedule of Classes. May be repeated for maximum of 6 hours if topic is different. Prerequisite: 48E:011. (Variable)

## 48E:112. Multimedia Production - 3 hrs.

Examination of principles of design and creation of interactive multimedia applications. Prerequisites: 48E:003; junior standing. (Offered Fall and Spring)
48E:113. Video Practicum: (Topic) - $\mathbf{1 - 6} \mathbf{h r s}$.
Production of weekly television program, with students filling the roles of all production staff. Topics indicated in Schedule of Classes. May be repeated for maximum of 6 hours if topic is different. Prerequisite: 48E:013. (Variable)
48E:115. Advanced Reporting for Electronic Media: (Topic) - 3 hrs.
Principles and practices of radio or television news gathering and presentation. Writing, field acquisition of information, editing and story construction, performance, and analysis of news process. Topics indicated in Schedule of Classes. May be repeated for maximum of 6 hours if topic is different. Prerequisite: 48E:073. (Variable)
48E:117. Electronic Media Projects - 1-6 hrs.
Individualized independent production for audio and/or video. Students work under the supervision of faculty on a major project beyond the scope of existing courses. May be repeated for maximum of 6 hours. Prerequisites: 48E:011 or 48E:013; junior standing; consent of instructor. (Variable)
48E:121(g). Electronic Media and Culture - 3 hrs.
Examination of electronic media and its relationship to culture. Use of a number of approaches to define culture and to analyze media products as cultural forms. Prerequisites: 48E:021; junior standing. (Offered Fall)
48E:123(g). Electronic Media Form, Content, Criticism - 3 hrs.
Advanced examination of electronic media programming forms and content as an art form and as a vehicle for dissemination of information. Analysis may include historical and/or contemporary examples. Topics indicated in Schedule of Classes. May be repeated for maximum of 6 hours if topic is different. Prerequisites: 48E:021; junior standing. (Variable)

## 48E:131(g). Electronic Media: Audience Analysis - 3 hrs.

Examination of characteristics and behaviors of electronic media audiences. Special attention to audience research methodologies and impact of new communication technologies on audience behavior. Prerequisites:

48E:021; junior standing. (Offered Fall)
48E:132(g). Electronic Media: Law and Policy - 3 hrs.
Examination of electronic media and related policies and procedures in the United States, including areas of broadcast, common carrier, and cable regulations. Prerequisites: 48E:021; junior standing. (Offered Spring) 48E:134(g). Electronic Media Management - 3 hrs.
Examination of administrative oversight of electronic media business aspects sùch as production, programming, personnel, sales, and engineer ing. Prerequisites: 48E:021; junior standing. (Offered Fall)
48E:136. Electronic Media Sales and Promotion - 3 hrs.
Sales techniques in television and radio; analysis of sales organization, and operations; principles and problems of broadcast promotions; and principles and practices of television and radio development, includind promotion and fund raising. Prerequisites: 48E:071; junior standing, (Variable)

## 48E:138(g). Broadcast and Cable Programming - 3 hrs.

Informational programming responsibilities for radio and television, including development of a philosophy concerning effective programminy strategies. Prerequisites: 48E:021; junior standing. (Variable)
48E:139(g). Electronic Media Industries: (Topic) - 3 hrs.
Focus on operation of various mass media industries as they evolved and function as social, cultural, political, and economic entities. Topics indicated in Schedule of Classes. May be repeated for maximum of 6 hours if topic is different. Prerequisites: 48E:021; junior standing. (Variable)
48E:141(g). Electronic Media: Processes and Effects - $\mathbf{3}$ hrs.
Examination of processes, functions, and effects of electronic media Special attention to impact of electronic media on the nature of political process, violence and aggressive behavior, and individual attitudes and behavior. Prerequisites: 48E:021; junior standing. (Offered Spring)
48E:161(g). Communication Technologies - 3 hrs.
Examination of past, current, and emerging communication technologies and how they affect those who use them. Emphasis on the variety of social consequences, intended or not, that can result from use and interaction with communications technologies. Prerequisites: 48J:002; junioz standing. (Offered Fall and Spring)
48E:166(g). Selected Topics in Electronic Media - 3 hrs.
Extensive work in specialized electronic media concepts, processes and approaches. May be repeated once on a different topic. Prerequisite: junior standing. (Variable)
48E:171(g). Script Writing - 3 hrs.
Theory and practice of writing scripts for nonjournalistic programming in audio and video, including information, dramatic, and variety formats. Prerequisites: 48E:013; junior standing. (Variable)
48E:191. Applied Electronic Media - 1 hr. (See 48E:091)
(Offered Fall, Spring, and Summer)
48E:195. Senior Seminar in Electronic Media - 1 hr.
Exploration of trends in electronic media field as applied to assessment of student's electronic media knowledge and skills. Synthesis paper required. Prerequisite: senior standing. (Offered Fall and Spring)
48E:197(g). Internship in Electronic Media - 1-6 hrs.
Intensive work in specialized area at off-campus work facility. May be repeated for a maximum of 6 hours. Prerequisites: junior standing; consent of intern advisor and department head. (Offered Fall, Spring, and Summer)
48E:201. Introduction to Graduate Study and Research - 3 hrs.
(Cross listed as 48C:201) (Offered Fall)
48E:222. Seminar in Mass Communication - 3 hrs.
Various topics will be offered with specific title indicated in Schedule of Classes. May be repeated more than once on different topic. (Variable)
48E:224. Mass Communication Theory - 3 hrs .
For beginning graduate students to explore mass communication inquiry. Provides working knowledge of some of the major literature on mass
communication theory and research. (Variable)
48E:291. Projects in Electronic Media - 1-3 hrs.
(Cross listed as 48C:291) (Variable)
48E:292. Graduate Internship - 2-3 hrs.
(Cross listed as 48C:292) (Offered Fall and Spring)
48E:299. Research.
(Offered Fall, Spring, and Summer)

## 48J: (Journalism)

48J:002. Mass Communication and Society - 3 hrs.
Survey of basic mass communication processes, including history and structure of media and media-related industries and sales, audiences, effects, careers, and future directions. (Offered Fall and Spring)
48J:007. Reporting Methodologies and Sources - 3 hrs.
Emphasis on information gathering techniques for the mass media, including examination of search strategies, sources, and news values. (Offered Fall and Spring)
48J:071. News Writing for Print Media - $\mathbf{3}$ hrs.
Principles and practice of writing, editing, and compiling news for the print media. Prerequisites: 48J:002; 48J:007. (Offered Fall and Spring) 48J:091; 48J:191. Applied Journalism - 1 hr .
Credit for approved work in journalism (e.g., campus newspaper or related activity). May be repeated for maximum of 4 hours. Prerequisite: consent of instructor. (Offered Fall and Spring)
48J:121(g). History of Mass Communication - 3 hrs.
Development of the structure, economics, and content of communication in the United States; examination of significant persons and events contributing to the technological, economic, and social development of mass media. Equal emphasis on print and electronic media. Prerequisites: 48):002; junior standing. (Offered Spring)

48, $124(\mathrm{~g})$. Communication Theories $\mathbf{- 3} \mathbf{~ h r s . ~}$
(Cross listed as $48 \mathrm{C}: 124 \mathrm{~g}$ ) (Offered Fall and Spring)
48, $: 132(\mathrm{~g})$. Mass Communication Law and Ethics- 3 hrs.
Origins and backgrounds of mass communication law and ethics, including that in journalism and public relations. Contemporary problems and issues in mass communication-related law and ethics. Libel, fair trial, law, and self-regulation in journalism, public relations, and advertising. Prerequisite: junior standing, (Offered Fall and Spring)
48,:151(g). Global Mass Communication Systems - 3 hrs.
Media practices and philosophies in the major regions of the world. Government and economic structures of global communications processes and practices. Prerequisites: 48J:002; junior standing. (Offered Fall)
48J:166. Selected Topics in Mass Communication - 3 hrs .
Study of current issues in mass communication. Prerequisite: 48J:002; junior standing. (Variable)
48::171(g). Advanced Reporting - 3 hrs.
Gathering information and writing and editing of complex news stories; emphasis on advanced techniques of interviewing, journal research, and personal observation. Prerequisites: 48):071; junior standing. (Offered Fall and Spring)
48J:172. Editing and Design - 3 hrs.
Copyreading, proofreading, writing headlines; studying make-up, typography, and photography. Prerequisite: 48J:071 or consent of instructor. (Offered Fall and Spring)

## 48, $: 176(\mathrm{~g})$. Magazine Article Writing - 3 hrs.

Writing and marketing different types of articles for various publications. Prerequisites: 48J:071 or 620:015 or consent of instructor; junior standing. (Offered Spring)

48, 178(g). Specialized Reporting: (Topics) - 3 hrs.
Prepares students to gather and report news in specialized areas such as business, education, sports, science, health, environmental issues, and international affairs. Two or three topics to be included in each offering of the course; topics indicated in Schedule of Classes. May be repeated more dthan once on different topic. Prerequisites: 48J:171 or consent of instructor; junior standing. (Variable)
48J:191. Applied Journalism - 1 hr .
(See 48J:091) (Offered Fall and Spring)

## 48, :197(g). Internship in Journalism - 1-6 hrs.

Intensive work in specialized area at off-campus work facility. May be repeated for maximum of 6 hours. Prerequisites: junior standing; consent of intern advisor and department head. (Offered Fall, Spring, and Summer)

## 48P: (Public Relations)

## 48P:005. Principles of Public Relations - 3 hrs.

Introduction to theories, processes, and techniques involved in researching, planning, and implementing programs designed to influence public opinion and human behavior. Prerequisites: 48C:001; 620:005. (Offered Fall and Spring)

## 48P:091; 48P:191. Applied Public Relations - 1 hr .

Credit for approved work in public relations (e.g., problems of campaign on campus or in the community). May be repeated for maximum of 4 hours. Prerequisite: consent of instructor. (Offered Fall and Spring)

## 48P:170(g). Global Public Relations - 3 hrs.

Examination and comparison of cultural and geopolitical distinctions of global public relations practice. Prerequisite: junior standing. (Offered Fall)

## 48P:173. Public Relations Writing - 3 hrs.

Conceptualization and multi-media adaptation of copy for public relations campaigns. Prerequisite: 48J:007. (Offered Fall and Spring)
48P:182(g). Public Relations Campaign Methods - 3 hrs.
Analysis and production of public relations tools; techniques to gain reaction and support from specialized groups. Planning and preparation of public relations communications materials and use of controlled (public) media to reach target audiences. Prerequisites: 48P:005; junior standing. (Offered Fall and Spring)
48P:184(g). Public Relations: Integrated Communications - 3 hrs.
Study of strategies and practice of skills needed to practice "Integrated Communications", including use of public relations in the mix of marketing communication function within organizations. Prerequisite: junior standing. (Offered Spring)
48P:188(g). Public Relations: Cases and Studies - 3 hrs.
Analysis of selected cases and their ethical implications; design and simulation of particular public relations campaigns conducted by students. Prerequisite: senior standing or consent of instructor. (Offered Fall and Spring)
48P:190(g). Public Relations Management - 3 hrs.
Study and analysis of strategies and processes used in managing firms and internal departments; emphasis on management of on-going relations programs. Prerequisites: 48P:182; junior standing. (Offered Spring)

## 48P:191. Applied Public Relations - 1 hr. (See 48P:091)

(Offered Fall and Spring)
48P:197(g). Internship in Public Relations - 1-6 hrs.
Intensive work in specialized area at off-campus work facility. May be repeated for maximum of 6 hours. Prerequisites: junior standing; consent of intern advisor and department head. (Offered Fall, Spring, and Summer)
48P:201. Introduction to Graduate Study and Research - 3 hrs.
(Cross listed as 48C:201) (Offered Fall and Spring)

48P:222. Seminar in Mass Communication - $\mathbf{3}$ hrs.
(Cross listed as 48E:222) (Variable)
48P:224. Mass Communication Theory - 3 hrs.
(Cross listed as 48E:224) (Variable)
48P:282. Seminar in Public Relations - 3 hrs.
Various topics offered with specific title indicated in Schedule of Classes. May be repeated more than once on different topic. (Variable)
48P:292. Graduate Internship - 2-3 hrs.
(Cross listed as 48C:292) (Offered Fall and Spring)
48P:299. Research.
(Offered Fall, Spring, and Summer)

## 490 Theatre

## 490:001. Acting I -3 hrs.

Introduction to the craft of acting beginning with exercises and culminating in applying the experience from those exercises to a scene from a play. Exploration of increasing self-awareness. Discussion, 3 periods; lab, 3 periods. FOR COMMUNICATION-THEATRE TEACHING MAJORS AND MINORS AND NON-THEATRE MAJORS ONLY. (Offered Fall and Spring)

## 490:002. The Theatrical Arts and Society - 3 hrs.

Audience-oriented introduction to the dramatic arts, including the live theatre, film, and television, and their interrelationships with society. Arranged lab required. Lab fee. (Offered Fall and Spring)
490:010. Fundamentals of the Theatre Experience - 4 hrs.
Introduction to basic components of theatrical production. Exploration of, and experience with, concepts, processes, and theories of theatre, including development of skills and techniques in preparation and performance. Participation on production(s) required. Discussion, 4 periods; lab, 4 periods. Lab fee. (Offered Fall and Spring)

## 490:015. Stagecraft - 3 hrs.

Basic skills of stagecraft and their application to theatrical production for scenery, costumes, and lighting. Lectures and project-oriented labs introduce students to building materials, tool techniques, graphic communication systems, and project planning. Lab fee. (Offered Fall and Spring)
490:024. Acting II - 2 hrs.
Deepens understanding of and proficiency at the craft of acting through designated exercises, scene work, observations, and discussion; includes work in the use of objective and physical action on a personal level. Discussion, 2 periods; lab, 2 periods. Prerequisite: 490:010. (Offered Fall and Spring)
490:027. Audition Techniques - 1 hr .
Selection, preparation, and performance of appropriate audition materials and development of proper audition behavior for the actor. Meets 2 hours per week for 1 hour credit. Prerequisites: 490:010; 490:024 or consent of instructor. (Offered Fall)

## 490:034. Playscript Analysis and Interpretation - 3 hrs.

Readings and analysis of plays (Greek to the present) in preparation for production. Prerequisite: 490:010. (Formerly 490:134) (Offered Fall and Spring)
490:040. Drawing and Rendering for the Theatre - 3 hrs.
Introduction to basic graphic methods for theatre production with emphasis on representational drawing and introduction to rendering. Prerequisite for Theatre majors: 490:010. Prerequisite for other students: consent of instructor. (Offered Fall)

## 490:050. Thaatre Practicum I- 1 hr .

Credit for approved work in theatre production (e.g., running crew, construction crew, performance). Two required (only one may be in performance). Prerequisite: 490:010; 2.50 GPA. (Offered Fall and Spring)
490:054. Production Studies - 3 his.
Involvement in a play's production process combined with an in-depth
study of a topic related to that production. Prerequisite: 490:010. (Vars able)

## 490:056. Collaborative Process - 3 hr .

Collaboration in the creation and presentation of devised work. Prerequl| site: 490:010. (Offered Spring)
490:060. History of the Theatre I- 3 hrs .
Examination of plays, production methods, and historical trends in the theatre from its beginnings through 1800. Prerequisite for Theaty majors: 490:010. Prerequisite for other students: consent of instructol (Offered Fall)

## 490:061. History of the Theatre II - 3 hrs.

Examination of plays, production methods, and historical trends in the theatre from 1800 through the present. Prerequisite for Theatre majoz 490:010. Prerequisite for other students: consent of instructor. (Offered) Spring)
490:066. Theatre and lits Literature I - 1 hr .
Selected readings in theatre literature. (Offered Fall; section 2 for junion) and seniors offered Spring)
490:101. Creative Drama - 3 hrs.
Prepares students to guide children and young adults in creative dramed Study of the art of spontaneous drama as it relates to education and development of young people cognitively and creatively. Lab fee. (Offered Fall and Spring)

## 490:102(g). Creative Drama Practicum - 3 hrs.

Experience in learning to adapt materials for spontaneous drama and experiment with techniques of guidance in an actual classroom situatio under supervision of classroom teacher and instructor of the course. Prerequisites: 490:101; junjor standing. (Offered Fall and Spring)
$490: 104(\mathrm{~g})$. Theatre for Youth - 3 hrs.
Specific problems of producing theatre for children, including reading in children's literature, child psychology, and plays. Practical experiene in improvised and scripted performances. Prerequisite: junior standing, (Offered Spring)

## 490:106. Theatre in Education - 3 hrs .

Application of theatre performance and improvisation techniques to the teaching of a specific curricular topic intended for young audiences. (Variable)

## 490:108(g). Methods of Teaching Theatre in High School - 2 hrs.

Theory for teaching theatre in the secondary school; practical experiend in techniques for teaching, directing, and relating theatre to high school students. Highly recommended before student teaching. Credit also as a course in education for student whose major is speech. Prerequisites: 12 semester hours of speech; junior standing; consent of instructor. (Offered Fall)

## 490:121. Movement for the Actor - 3 hrs .

Designed to encourage relaxation, limberness, and strength. Exploratio4 of ways in which movement and sensory work can trigger and influence character work and emotional connection. Discussion, 3 periods; lab, 3 periods. Prerequisite: 490:010. (Offered Fall)

## 490:122. Vocal Production for the Actor - 2 hrs.

Using relaxation and breathing techniques developed by Kristin Linklater, students will release tension and old habits to discover organic, natural, and personal vocal response. Discussion, 2 periods; lab, 2 periods. Prerequisite: 490:010; 490:121. (Offered Fall)
490:123. Speech for the Actor - 2 hrs.
Introduction to International Phonetic Alphabet and Standard American Stage Speech. Discussion, 2 periods; lab, 2 periods. Prerequisites: 490:010; 490:122. (Offered Spring)
490:124(g). Acting III - 3 hrs.
Focus on individual instrumental problems while enforcing craft skills on more challenging texts. May be repeated for credit only with consent of instructor. Discussion, 3 periods; lab, 3 periods. Prerequisites: 490:010;

490:024; 490:122; or consent of instructor; junior standing. (Offered Spring)
490:125. Movement and Voice Studio - 1 hr .
Continuation of movement/voice training through application of a focused physical or vocal methodology. Prerequisites: 490:121; 490:122 or consent of instructor. (Offered Spring)

## 490:126(g). Acting Styles - 3 hrs.

Application of techniques learned in Acting II, including theoretical studies of various styles of acting as well as extensive scene work. Discussion, 3 periods; lab, 3 periods. Prerequisites: 490:010; 490:024; 490:060; 490:061; 490:122; or consent of instructor; junior standing. (Offered Fall)
490:127(g). Acting Studio - 3 hrs.
Advanced acting class focusing on scene work. Prescriptive work will be assigned for individual instrumental needs. May be repeated twice for credit. Prerequisites: 490:010; 490:024; 490:124; junior standing. (Variable) 490:129(g). Stage Combat - 2 hrs.
Basic skills of modern and historic styles of fencing, swordplay, and other modes of fighting, and application of these skills to the planning and safe execution of an effective and artistic stage fight. Discussion, 2 periods; lab, 2 periods. Prerequisite: junior standing. (Offered Spring)
490:140. Production Techniques Studio: Drafting, Pattern Development,
Scene Painting, or Make-up - 1 hr.
Intensive study and project work in the following advanced skill areas: Drafting for the Theatre, Pattern Development for Theatre Costumes, Scene Painting, and Make-up. Discussion, 1 period; lab, 1 period. Lab fee. Prerequisite for Theatre majors: 490:040. Prerequisite for other students: consent of instructor. (Drafting - offered Fall; Pattern - offered Fall; Painting - offered Spring; Make-up - offered Spring)

## 490:141(g). Design: Sets - 3 hrs.

Discussion and project work in the development of scenery for the performing arts. Prerequisites: 490:010; 490:140 (Drafting); sophomore standing. (Formerly part of $490: 142 \mathrm{~g}$ ) (Variable)
490:142(g). Design: Lights - 3 hrs.
Discussion and project work in the development and presentation of lighting for the performing arts. Prerequisites: 490:010; 490:140 (Drafting); sophomore standing. (Variable)
490:143(g). Design: Costumes - 3 hrs .
Discussion and project work in the development of costumes for the performing arts. Prerequisites: 490:010; 490:015 or 490:140 (Patterning); sophomore standing. (Formerly part of 490:142g) (Variable)
490:144(g). Topics in Theatre Design and Production - 3 hrs.
Advanced topics in Design and Production involving research and experiential investigation of production techniques. Rotating topics will include: Period Styles for Theatre, Advanced Problems in Theatre: Make-up Production, Costume Production, Scenery Production, Lighting Production, and Sound Production. May be repeated for maximum of 6 hours. Prerequisites for Theatre majors: 490:040; one Production Techniques Studio (490:140); junior standing. Prerequisites for other students: junior standing; consent of instructor. (Variable)

## 490:150. Theatre Practicum II - 1 hr .

Credit for approved work in advanced theatre production (e.g., crew head, stage manager, and performance). Two required (only one may be in performance). Prerequisite: 490:050; 2.50 GPA. (Offered Fall and Spring)

## 490:151(g). Theatre Production - $\mathbf{1 - 4} \mathbf{~ h r s . ~}$

Assumption of a major production responsibility under supervision of faculty. Lab, 2 hrs. May be repeated in various production areas for a maximum of 8 hours. Prerequisites: junior standing; consent of supervising instructor. (Offered Fall and Spring)

## 490:153. Synthesis of the Theatre Experience - 1 hr .

Through experiences with contemporary theatre artists and educators, students engage in guided research to facilitate their transition to post-
graduate training and work experiences. Prerequisites: 490:010; 490:056; senior standing; or consent of instructor. (Offered Fall)
490:155(g). Theatre Management - 3 hrs .
Intensive study of business practices in the academic, community, and commercial theatre. Field trips and guest lectures. Prerequisite: junior standing. (Variable)

## 490:156(g). Plays in Production - 3 hrs.

Examination of plays as they have been interpreted through theatrical production. Emphasis on plays of a particular playwright, particular era, specific genre, or that reflect a particular production style. May be repeated for maximum of 6 hours. Prerequisites for Theatre majors: 490:060; 490:061; junior standing. Prerequisites for other students: junior standing; consent of instructor. (Offered Fall)
490:157(g). Stage Management - 1 hr.
Introduction to basic techniques, procedures, and forms used in stage managing theatre and allied performing arts. Prerequisites: 490:010; sophomore standing or consent of instructor. (Offered Spring)

## 490:158(g). Internship - 1-8 hrs.

Intensive work in specialized area at off-campus theatre facility. For advanced students in theatre. May be repeated for maximum of 8 hours. Prerequisites: junior standing; consent of advisor and department head. (Variable)

## 490:160(g). History of the Theatre ill - 3 hrs.

Examination of plays, production methods, and historical trends in the theatre. Sections may examine African American Theatre History, American Theatre History, Modern European Theatre History (1900-present), Feminist Theatre, and Period Styles in Theatre Design. May be repeated for maximum of 9 hours. Prerequisites: 490:010; 490:060; 490:061; or consent of instructor; junior standing. (Variable)

## 490:161. Directing I - 3 hrs.

Analysis of plays and fundamentals of directing. Discussion, 3 periods; lab, 3 periods. Prerequisites for Theatre majors: 490:010; 490:024; 490: 034; junior standing. Prerequisite for Communication-Theatre MajorsTeaching: 490:001; 490:015; 490:034; junior standing. (Formerly 490:063) (Offered Fall and Spring)
490:162(g). Directing II - 3 hrs.
Scene study in direction, analysis of text and working with actors. Scene work culminates in directing of a one-act play. Continues work begun in 490:161. Discussion, 3 periods; lab, 3 periods. Prerequisites: 490:010; 490:161; junior standing. (Variable)

## 490:164(g). Advanced Directing and Design - 3 hrs.

Collaborative approach in the advanced analysis of selected scripts and the creation of unified production concepts. Directors will continue work begun in 490:161. Designers will continue work in design theory and techniques, and develop designs in more than one area for portfolio presentation. Discussion, 3 periods; lab, 3 periods. Prerequisites: 490:010; 490:056; 490:161; junior standing. (Variable)
490:166(g). Readings in Theatre - 3 hrs.
Intensive investigation of a theatre style, form, period, or concept. May be repeated for maximum of 6 hours. Prerequisites: junior standing; consent of instructor. (Variable)
490:168(g). Playwriting - 3 hrs.
Prerequisites for Theatre majors: 490:010 or consent of instructor; junior standing. Prerequisites for other students: consent of instructor; junior standing. (Offered Spring)

## 490:220. Teaching Acting - 3 hrs.

Practical model for teaching acting at all levels. Explores theoretical and experiential modes. Prerequisite: graduate standing. (Variable)
490:280. Introduction to Graduate Studies in Theatre - 3 hrs .
(Offered Fall)

## 490:284. Dramatic Theory - 3 hrs.

Review and examination of major theories of drama and performance from an historical or thematic base. May be repeated for credit. Prerequisite: graduate standing or consent of instructor. (Offered Spring)
490:285. Readings in Theatre - 3 hrs.
(Variable)
490:289. Seminar in Theatre - 3 hrs.
Various topics offered with specific title indicated in Schedule of Classes. May be repeated more than once on a different topic. (Offered Fall)
490:299. Research.
(Variable)

## 51_Communicative Disorders

## 51C: (Commumicative Disorders)

51C:006. Understanding Communication Disorders - 3 hirs.
(Formerly 51C:100) (Offered Fall)
51C:106. Language Acquisition in Children - 3 hrs.
Study of the acquisition of phonological, semantic, syntactic, and pragmatic systems as these interface with brain maturation and motor, cognitive, and social development. Biological and social/interactional factors examined from variety of perspectives, stressing "applied" orientation. Corequisite: 51C:107. (Offered Spring)
51C:107. Language Analysis Lab - 1 hr .
Experience in applications of language sample analysis procedures for children at different levels of development. Corequisite: 51C:106. (Offered Spring)

## 51C:111. Phonetics in Communicative Disorders - 3 hrs.

Proficiency in use of International Phonetic Alphabet with emphasis on physiological and linguistic aspects of speech sound production. (Offered Spring)
51C:114. Anatomy and Physiology of Speaking Mechanism - 3 hrs.
Introduction to functional anatomy and physiology in the speech mechanism. Prerequisite: 51C:006. (Offered Spring)
51C:125. Disorders of Speech Sounds - 3 hrs.
Study of disordered phonological/articulatory systems; exploration of assessment and intervention principles and practices. Prerequisites: 51C:106; 51C:111; or consent of instructor. (Offered Fall)
$51 \mathrm{C}: 127(\mathrm{~g})$. Disorders of Language - 3 hrs.
Assessment and intervention principles and techniques for preschool and school-aged, language-disordered children. Examination of medical, psychological, and linguistic orientations. Prerequisites: 51C:106; junior standing. (Offered Fall)

## 51C:129(g). Clinical Examination - 2 hrs .

Theoretical and practical aspects of the evaluation process. Prerequisites: 51C:111; Communicative Disorders majors only; junior standing. (Offered Spring)
51C:151. Clinical Processes I, Analysis and Observation - 1 hr .
Introduction to role of speech-language pathologists and audiologists as clinicians; emphasis on analysis and observation of remediation. Prerequisite: 51C:006 or consent of instructor. (Offered Fall)
51C:152. Clinical Processes II, Participation - 1 hr.
Introduction to role of speech-language pathologists and audiologists as clinicians; emphasis on participation as an assistant in the UNI Roy Eblen Speech and Hearing Clinic. Prerequisite: 51C:151 or consent of instructor. (Offered Spring)
51C:155. Clinical Practice - 1 hr .
Clinical experience evaluation and remediation of language and articulation disorders as well as experience in testing of hearing. Must be repeated for total of 2 hours for students planning to major in Speech-Language Pathology at the graduate level. Prerequisites: 51C:125; 51C:127; Com-
municative Disorders majors only. (Offered Fall, Spring, and summer), 51C:160(g). Augmentative Communication - 2 hrs.
Study of theoretical and practical aspects of planning augmentative compt munication for the severely communicatively disabled. Prerequisitu 220:050 or 51C:006; junior standing. (Offered Fall)

## 51C:162(g). Speech Science - 3 hrs.

Study of sound analysis techniques used in the diagnosis of and researol into disorders of communication. Includes laboratory experience. Prey requisites: 51C:175; junior standing. (Offered Spring)
51C:164(g). Neuroscience and the Study of Communicative Disorders -3 hrs.
Study of neuroanatomical and neurophysiological bases of speech production. Prerequisites: 51C:114; junior standing. (Offered Fall)
51C:166(g). Introduction to Fluency - 3 hrs .
Study of etiology, diagnosis, and management of fluency disorders. Prerequisites: 51C:106; 51C:114; junior standing. (Offered Spring)
51C:168(g). Communication Problems of Special Populations - 2 hrs.
Study of communication patterns, assessment accommodations, and intervention practices for selected low-incidence preschool and school-age clinical categories. Prerequisite: junior standing. (Offered Spring)
51C:170. Introduction to American Sign Language (ASL) - 3 hrs.
Introduction to principles and use of American Sign Language. Prerequep site: junior standing. (Offered Fall, Spring, and Summer)
51C:173. Advanced American Sign Language (ASL) - 3 hrs.
Designed for students with basic communication skills in American Sign Language. Emphasis on advanced practice of American Sign Language and study of the deaf culture. Prerequisites: 51C:170; junior standing (Variable)
51C:175(g). Hearing Science - 3 hrs .
Physical concepts and acoustics relating to propagation and measurement of sound. Anatomy and physiology of the ear including neurophysiology of the peripheral and central auditory system, and psychoacoustics. Prerequisites: 51C:006; junior standing. (Offered Fall)
51C:177 (g). Introduction to Audiology - 3 hrs .
Basic hearing science, types of hearing loss, and audiometric measurement. Prerequisites: 51C:175; junior standing. (Offered Spring)
51C:180 (g). Aural Rehabilitation - 3 hrs.
Principles and procedures for assessment and rehabilitation of communi-1 cation deficits of hearing-impaired persons-emphasizing amplification| systems, auditory training, speech-reading, and total communication for the hard-of-hearing and deaf. Prerequisites: 51C:175; 51C:177; juniou| standing. (Offered Fall)
51C:190(g). Current Problems in Speech-Language Pathology and Audiology - 1-2 hrs.
Major issues confronting clinicians, researchers, and the profession. Top-1 ics to be determined by instructors. May be repeated as section topic change. Prerequisite: senior or graduate standing or consent of instructor| (Variable)
51C:197(g). Honors in Communicative Disorders - 2-3 hrs.
Development and implementation of an approved research project in an area of communicative disorders. Prerequisite: junior standing; consent of instructor. (Variable)

## 51C:200. Research Methods in Speech-Language Pathology and Audiology - 2 hrs.

Introduction to methodology, various designs, and report preparation for research. Prerequisite: approved statistics course. (Offered Fall and Spring)
51C:257. Internship in Clinical Settings - 4-16 hrs.
Advanced, supervised clinical experience offered in a variety of noneducational settings such as hospitals, rehabilitation clinics, and centers devoted to the treatment of speech and language disorders. Prerequisite: consent of instructor. (Offered Fall, Spring, and Summer)

## 51C:282. Professional lssues - 1 hr .

Study of current professional issues in speech-language pathology. Prerequisite: graduate major in speech-language pathology. (Offered Spring)
51C:205. Individual Readings - 1-2 hrs.
Project must be approved before beginning of semester in which work is to be done. May be repeated. Prerequisite: consent of instructor. (Variable) 51C:299. Research - 1-6 hrs.
Prerequisites: consent of instructor and department head. (Variable)

## 51S: (Speech-Language Pathology)

51S:220. Cleft Palate - 2 hrs.
Etiology, nature, habilitation, and associated problems resulting from facial clefts and other structural facial deviations. Evaluative and therapeutic principles and practices. Includes laboratory. Prerequisite: 51C:125 or consent of instructor. (Variable)

## $51 \mathrm{~S}: 2 \mathrm{~m}$. Language Training Strategies - 3 hrs .

Review of current literature materials for language-disordered children. Requires active participation for demonstrations and presentations of articles and materials. Prerequisites: 51C:106; 51C:127; or consent of instructor. (Offered Fall)

## 51S:225. Disorders of Voice - 3 hrs.

In-depth study of the etiology, diagnosis, and management of voice disorders. Prerequisites: 51C:114; 51C:164; or consent of instructor. (Offered Fall)
51S:228. Aphasia and Related Disorders - 3 hrs .
Diagnosis and remediation of aphasia in adults. Prerequisite: 51C:164 or consent of instructor. (Offered Spring)
51S:229. Dysphagia - 2 hrs.
Diagnosis and remediation of dysphagia in children and adults. Prerequisite: 51C:164. (Offered Spring)
51S:230. Motor Speech Disorders - 2 hrs.
Neurophysiological bases, differential diagnosis, and clinical management of motor speech disorders in children and adults. Prerequisite: 51C:127 or consent of instructor. (Offered Fall)
51S:232. Clinical Phonology - 2 hrs.
Review of current literature on phonological disorders. Includes issues and procedures in the assessment and management of such disorders. .
Prerequisite: 51C:125 or consent of instructor. (Offered Spring)
51S:250. Clinical Assessment - 1 hr .
Process of assessing individuals with communicative disorders, including strategies for interviewing and examining clients; preparation of clinical reports; clinical routine and practical application. Must be repeated for total of 3 hours for students planning to major in Speech-Language Pathology at the graduate level. Corequisite: 51S:255 or consent of instructor. (Offered Fall and Spring)
51S:255. Advanced Clinical Practice - 1-4 hrs.
Clinical experience in diagnosis and remediation of speech, language, and/or hearing problems at an advanced level of preparation and responsibility. Must be taken for minimum of four academic terms in the graduate program. Prerequisites: 51C:155 or consent of instructor; individuals must be accepted graduate students in the Speech-Language Pathology major. (Offered Fall, Spring, and Summer)
51S:289. Seminar in Speech-Language Pathology - 2 hrs.
Seminars in special topics to be announced in the Schedule of Classes. No limit on number of times repeated as long as topic is different. Prerequisite: consent of advisor. (Offered Fall, Spring, and Summer)

## 520 Music

## 520:020. Our Musical Heritage - 3 hrs .

Exploration of music within the context of evolving Western culture. Music fundamentals and vocabulary. Repertories from the medieval world through the post-Romantic era. (Offered Fall and Spring)

## 520:030. Music of Our Time - 3 hrs .

Major trends in traditional and experimental art music, American popular music (from ragtime to rock), ca. 1900 to the present. (Offered Fall and Spring)
520:102(g). Music in Childhood Education - 2 hrs.
Methods and principles of music in the elementary classroom. Rudiments, aural training, selection, and study of materials for listening, rhythmic activities, and singing. No credit for music major or minor. Prerequisite: junior standing. (Offered Fall and Spring)
520:110. Arts Management in Music - 3 hrs.
Principles and techniques of music management in retail and professional performance sectors. Field trips and guest lecturers supplement classroom experiences. (Variable)

## 520:299. Research

(Variable)

## 530 Music Organizations and Ensemble

Organization and Ensemble Credit: 1 semester hour of credit may be earned by a student who completes a semester in an approved ensemble. Ensembles may be repeated for credit. Maximum of 2 credits for organization and ensemble participation may be earned in any one semester. For students who have been awarded two or three music scholarships or are majoring in more than one instrument/voice, a maximum of 3 credits for organization and ensemble participation may be earned in any one semester (with approval from the Director of the School of Music). Maximum of 2 credits in lazz Band I or Chamber Choir may be counted by music majors toward departmental ensemble requirement (or electives for B.A. students). All music ensembles are open to any university student by audition.

Ensemble numbers are assigned as follows, based on the student's classification:

## 530:010, 530:110(g). Chorus

(Concert Chorale, UNI Singers, Varsity Men's Glee Club, Women's Chorus, Chamber Choir) (Offered Fall and Spring)
530:012, 530:112 (g). Ensemble
(Offered Fall and Spring)
$530: 015,530: 115(\mathrm{~g})$. Band
Concert Band (Offered Fall); Symphotic Band (Offered Spring); Basketball Pep Band (Offered Spring); Wind Symphony (Offered Fall and Spring)
530:016, 530:116(g). Jazz Band
(Offered Fall and Spring)
530:017, 530:117(g). Orchestra
(Offered Fall and Spring)
530:018, 530:11 (g). Marching Band
(Offered Fall)

## 540 Music, Applied

Note: Before registration in Applied Music can be accomplished, the student must: 1) successfully complete an audition in the performance area (for composition students, a portfolio of original compositions must be submitted and accepted in lieu of an audition on an instrument or voice),
and 2) meet the proficiency standards of the division.
All undergraduate music majors must be enrolled in applied music continuously from the first semester of residence until satisfactory completion of the Senior Recital. It is expected the Senior Recital will be given in the eighth semester of study (seventh semester for students in the Music Education program). Credit hours for Applied Music study are classified as follows:

Performance - 3 credit hours
Composition - 2 or 3 credit hours
B.A. and Music Education - 2 credit hours

Secondary - 1 credit hour
Non-Music Major - 1-2 credit hours
One-hour ( 60 minutes) of individual instruction per week in the principal performing area (or a comparable equivalent arrangement of individual and/or small group instruction) is required for music majors. Practice and performance demands for Performance and Composition majors are generally more rigorous than those for the Music Education and B.A. majors. Secondary Instrument students will receive one halfhour ( 30 minutes) of Applied Music instruction each week. Non-Music majors will receive either one hour or 30 minutes of instruction depending on the number of credit hours elected. Each student's credit hour load for Applied Music will be determined in consultation with a School of Music advisor in advance of registration. All students in the freshman music core will enroll for 2 semester hours of credit each semester. Students approved for the Performance major under the Bachelor of Music degree will register for 3 semester hours in Applied Music beginning in the sophomore year, and Composition majors will register for 3 semester hours in Applied Music beginning in the junior year.

Graduate students approved for the Performance, Piano Performance and Pedagogy, Composition, or Conducting majors under the Master of Music degree will register for 2,3, or 4 (2-4) semester hours of credit in Applied Music during the fall or spring semesters in residence. Number of hours will be determined by the applied instructor and Associate Director.

The appropriate applied faculty will determine the level of the student's qualifications ( $540: \mathrm{Nxx}, 540: 0 \mathrm{xx}, 540: 1 \mathrm{xx}$, or $540: 2 \mathrm{xx}$ ) by audition and/or previous work on an instrument or in voice. A 200 number can be assigned only to graduate students in Performance, Piano Performance and Pedagogy, Composition, and Conducting programs who have satisfactorily completed an audition and are preparing for a graduate major in voice, instrumentation, or composition. All other graduate applied students will receive $540: 1 \times x(\mathrm{~g})$ credit.

## 540:Nxx. Applied Music for the Non-Music Major.

Private applied music instruction for students not pursuing a degree program in music. Emphasis on basic skills oriented toward immediate performance needs. Credit normally will not be applied toward music major or minor requirements. (Offered Fall and Spring)
$540: 030,540: 130(\mathrm{~g}), 540: 230$. Fiute
(Offered Fall and Spring)
540:031, 540:131(g), 540:231. Oboe
(Offered Fall and Spring)
540:032, 540:132(g), 540:232. Clarinet
(Offered Fall and Spring)
540:033, 540:133(g), 540:233. Bassoon
(Offered Fall and Spring)
540:034, 540:134(g)، 540:234. Saxophone
(Offered Fall and Spring)
540:035, 540:135(g), 540:235. French Horn
(Offered Fall and Spring)
540:036, 540:136(g), 540:236. Comet-Trumpet
(Offered Fall and Spring)

540:037, 540:137(g), 540:237. Trombone
(Offered Fall and Spring)
540:038, 540:138(g), 540:238. Euphonium
(Offered Fall and Spring)
540:039, 540:139(g), 540:239. Tuba
(Offered Fall and Spring)
540:040, 540:140(g), 540:240. Percussion
(Offered Fall and Spring)
540:041, 540:141(g), 540:241. Violin
(Offered Fall and Spring)
540:042, 540:142(g), 540:242. Viola
(Offered Fall and Spring)
540:043, 540:143(g), 540:243. Cello
(Offered Fall and Spring)
540:044, 540:144(g), 540:244. String Bass
(Offered Fall and Spring)
540:045, 540:145(g), 540:245. Harp
(Offered Fall and Spring)
540:046, 540:146(g), 540:246. Piano
(Offered Fall and Spring)
540:047, 540:147(g), 540:247. Group Piano
(Offered Fall and Spring)
540:048, 540:148(g), 540:248. Organ
(Offered Fall and Spring)
540:049, 540:149(g), 540:249. Voice
(Offered Fall and Spring)
540:050, 540:150(g), 540:250. Harpsichord
(Offered Fall and Spring)
540:051, 540:151(g), 540:251. Group Voice
(Offered Fall and Spring)
540:052, 540:152(g), 540:252. Guitar
(Offered Fall and Spring)
540:053, 540:153(g), 540:253. Jazz Guitar
(Offered Fall and Spring)
540:054, 540:154(g), 540:254. Composition
(Offered Fall and Spring)
540:055, 540:155(g), 540:255. Jazz Improvisation
(Offered Fall and Spring)
540:056, 540:156(g), 540:256. Jazz Bass
(Offered Fall and Spring)
540:057, 540:157(g), 540:257. Jazz Piano
(Offered Fall and Spring)
540:058, 540:158(g), 540:258. Jazz Saxophone
(Offered Fall and Spring)
540:060. Applied Piano Beyond Proficiency - 1 hr .
Piano instruction for students in music education and compositiond| theory programs who need lessons beyond Group Piano Level III. Prerequisites: Group Piano, Level III 540:047:09 or 10. (Offered Fall and Spring)
540:P46. Piano Proficiency - no credit.
Required of all undergraduate majors. (Offered Fall and Spring)
540:189. Senior Recital - no credit.
Required of all seniors. Prerequisite: 3 hours at 100 -level in major applied area. (Offered Fall and Spring)
540:221. Instrumental Conducting - $\mathbf{2 - 4} \mathbf{h r s}$.
Prerequisite: admission to Master of Music in Conducting. (Formerly 560:221) (Variable)
540:222. Choral Conducting - 2-4 hrs.
Prerequisite: admission to Master of Music in Conducting. (Formerly 560:222) (Variable)

## 560 Music Techniques

560:010. Double Reed Making Techniques - 1 hr .
Instruction in the techniques of making and adjusting bassoon, oboe, and English horn reeds. Section 01 for bassoon player; Section 02 for oboe/English horn players. May be repeated for credit. (Offered Fall and Spring)
560:017. Conducting I-Instrumental - 2 hrs.
Prerequisites: 580:014; 580:018; 580:028. (Offered Fall)
560:018. Conducting 1-Choral - 2 hrs.
Prerequisites: 580:014; 580:018; 580:028. (Offered Fall)
560:021. Conducting II-Instrumental - 3 hrs.
Advanced training in instrumental conducting with emphasis on orchestral and band scores and literature for small and large ensembles. Required of all instrumental music majors on teaching program. Prerequisite: 560:017 with minimum grade of C . (Offered Spring)
560:022. Conducting II-Choral - 3 hrs.
Training in choral conducting, rehearsal techniques, performance practices, and choral materials. Required on the teaching degree for voice majors and those keyboard majors who do not take 560:021. Prerequisite: 560:018 with minimum grade of C. (Offered Spring)
560:030. Diction for Singers I-1 hr.
Study and application of Italian and English speech sounds for use by singers, coach-accompanists, and teachers of choral music. (Variable)
560:031. Diction for Singers II - 1 hr.
Study and application of German and French speech sounds for use by singers, coach-accompanists, and teachers of choral music. Prerequisite: 560:030. (Variable)
560:040. Organ Techniques and Church Service Playing - 1 hr.
Selected problems in church service playing and aspects of organ design. May be repeated for credit. (Offered Fall and Spring)
560:045, 560:145(g). Vocal Coaching - 1 hr.
May be repeated for credit. Prerequisite for $560: 045$ : sophomore standing. Prerequisite for $560: 145 \mathrm{~g}$ : junior standing; consent of instructor. (Offered Fall and Spring)
560:052, 560:152(g). Instrumental Jazz Improvisation - 1 hr.
Elements of improvisation intended as an aid to the experienced instrumentalist and as a tool for the potential instructor. Areas available: Basic, Intermediate, and Advanced. Each area may be taken once for credit. (560: 052 for freshmen/sophomores; $560: 152 \mathrm{~g}$ for juniors/seniors/graduates.) Prerequisite: consent of instructor. (Beginning and intermediate sections offered every Fall; jazz theory section offered every Spring)
560:060. Introduction to Opera Performance - 2 hrs.
Introductory class that explores movement, imagination, and relationship between words and music necessary to perform art songs, arias, and music theatre numbers. Prerequisite: ability to read and process music. (Formerly 560:051 and 560:056) (Variable)

## 560:121(g). Conducting III-Instrumental - 2 hrs.

Techniques of conducting band and orchestral works; score study and analysis of major works representing all style periods. Class work includes conducting major works in rehearsal. May be repeated for credit. Prerequisites: 560:021; junior standing. (Variable)
560:122(g). Conducting III-Choral - 2 hrs.
Art and techniques of conducting choral and choral-orchestral literature as related to score study of major works from all major style periods. Rehearsal experience includes conducting major works, conducting and coaching of recitatives, score reading, problems of baton clarity, and rehearsal pacing. May be repeated for credit. Prerequisites: 560:022; junior standing. (Variable)

## 560:130(g). Music Technology I-2 hrs.

Acquisition of production skills for music printing, digital recording, sequencing, and arranging, using computer-based and other electronic
technology. Prerequisites: 530:0xx (four semesters); 580:014; 580:018; 580:028; junior standing. (Variable)
560:135(g). Accompanying - 1 hr .
The art of accompanying, both vocal and instrumental literature. Practical experience as accompanist for student soloists in public performance. May be taken twice for credit. Prerequisite: junior standing. Prerequisite or corequisite: 540:146 or consent of instructor. (Offered Fall and Spring)
560:145(g). Vocal Coaching - 1 hr.
(See 560:045) (Offered Fall and Spring)
560:152(g). Instrumental Jazz Improvisation - 1 hr .
(See 560:052) (Beginning and intermediate sections offered every Fall; jazz theory section offered every Spring)
560:161(g). Opera Workshop I-2 hrs.
Preparation and presentation of scenes from opera and musical theatre, focusing on the emotional and psychological construction of character; investigation of historical and stylistic nuances; exploration of the relationship between movement and meaning. Audition required. May be repeated for credit. Prerequisites: 560:060; junior standing. (Formerly 560:151g-01 and 560:156g) (Variable)
560:162(g). Opera Workshop II - 2 hrs.
Advanced study of operatic material (either a role or longer, more advanced scenes) appropriate for vocalists interested in professional singing. Exploration of roles in the Fach; networking and auditioning strategies; and professional document preparation. Audition required. May be repeated for credit. Prerequisite: 560:161; junior standing. (Formerly 560:151g-04 and 560:160g) (Variable)
$560: 250$. Projects in Music Techniques - 1-3 hrs.
(Variable)
560:252. Advanced Instrumental Jazz Improvisation - 2 hrs.
Advanced concepts of jazz improvisation, including the study of contemporary jazz compositions, complex harmony, chromatic linear resources, and intervallic techniques. Prerequisites: 560:152; graduate standing or consent of instructor. (Offered odd Springs)

## 570 Music Education and Methods

570:010. Instrumental Techniques - 1 hr .
Areas: flute, clarinet and saxophone, double reeds, high brass, low brass, high strings, low strings, percussion, and harp. Emphasis on pedagogy relevant to the elementary or beginning student musician. One hour credit for each area. Areas may not be repeated for additional credit. (Variable)
570:015. Introduction to Instrumental Techniques - 2 hrs.
Introduction to wind, percussion, and string instruments; attention to instrumental pedagogy and appropriate literature for beginning and elementary students. Prerequisites: acceptance into Choral/General Music Education program. (Offered Fall)
570:050. Introduction to Music Education - 2 hrs.
Overview of music education methodologies, philosophies, and techniques, including computer-based music instruction (CBMI). Techniques for audio and video recording of music ensembles. (Offered Fall and Spring)
570:130(g). Vocal Pedagogy - 2 hrs.
Techniques of diagnosing and discussing vocal problems as related to the singing voice, and a survey of pedagogic materials. Actual teaching experience under supervision. Prerequisites: music major; junior standing. (Offered Spring)
570:138(g). Instrumental Pedagogy - 2 hrs.
Topics vary depending upon instrument and instructor. Advanced techniques of solving physiological and psychological problems of performance. May be repeated with advisor approval. Prerequisites: 570:010 or
teaching experience; junior standing. (Variable)
570:141. Elementary/General Music Methods - 3 hrs.
Objectives and materials for and methods of teaching general music in public schools. Emphasis on contemporary approaches: Orff, Kodaly, Dalcroze, Integrated Arts, and other methodologies. Prerequisites: 570: 050; junior standing or consent of instructor. (Variable)

## 570:143. Music for the Pre-School Child - 2 hrs.

Study of musical perceptions and needs of 3 - to 5 -year-old children as they respond to music experiences (singing, playing instruments, and composing) within various environments (on playground, in a music corner, and in a soundbox). (Variable)

## 570:148(g). Piano Pedagogy: Elementary - 2 hrs.

Methods and materials related to the teaching of the elementary piano student, including psychological and technical development. Addresses business aspects. Observations of teaching required. Prerequisite: junior standing. (Variable)

## 570:149(g). Piano Pedagogy: Current Technological Trends - 1 hr .

Exploration of current trends in technology related to the field of piano and keyboard instruction for children and adults. Exploration of topics appropriate for the independent piano studio. Prerequisite: junior standing. (Variable)

## 570:153(g). Curriculum Development in Music Education - 1 hr .

Development of choral and general music teaching strategies and curriculum for the K-6 general music class. Prerequisites or corequisites: 570: 141 or consent of instructor; junior standing. (Variable)
570:161. Instrumental Methods I: Strings - 1 hr .
String methods and pedagogy for lessons and ensembles in a K-12 setting. Prerequisites: 560:017; 570:010:06 or 07; 570:050; junior standing. (Offered Fall)
570:162. Instrumental Methods II: Marching Band - 1 hr.
Fundamentals training, music selection and arranging, administrative approaches, and drill charting for school marching bands. Prerequisites: 560:017; 570:010:06 or 07; 570:050; junior standing. (Offered Fall)
570:163. Instrumental Methods III: Schopl Administration - 1 hr .
Provides students with the necessary information to help them work successfully with administrators, other teachers, community members, parents, and students in the K-12 school setting. Prerequisites: 560:017; 570:010:06 or 07; 570:050; junior standing. (Offered Spring)
570:164. Instrumental Methods IV: Jazz Band - 1 hr.
Jazz band methods and pedagogy for lessons and ensembles in the K-12 setting. Emphasis on rehearsal techniques and materials. Prerequisites: 560:017; 570:010:06 or 07; 570:050; junior standing. (Offered Spring) 570:165. Choral Methods and Materials - 3 hrs.
Organization and development of public school choral organizations. Emphasis on rehearsal techniques, vocal production and blend, and materials suitable for choral ensembles. Evaluation techniques appropriate to school music setting. Prerequisites: 560:018; 570:141; or consent of instructor. (Offered Spring)

## 570:197(g). Instrumental Upkeep and Repair - 2 hrs.

Areas: woodwinds, strings, brass, and percussion. Laboratory course with practical projects undertaken. Offered for instrumental majors. Prerequisite: junior standing. (Variable)
570:221. Research Methodology in Music Education - 3 hrs.
Introduction to various research methodologies used in music education.
Required of graduate Music Education majors. (Variable)
$570: 230$. Foundations of Music Education - 3 hrs.
Examination of the foundations and underlying principles of music education. (Variable)

## 570:245. Developments and Trends in Music Education - 2 hrs.

Evolving issues important to music educator. May be repeated for credit. Prerequisites: 570:050; junior standing or consent of instructor. (Variable)

570:250. Projects in Music Education - 1-3 hrs.
Students electing the non-thesis option will enroll in this course upos completion of course work. Course content consists of writing a final research paper. Students must enroll in this course continuously until the final research project has been completed. (Variable)

## 570:252. Jazz Pedagogy - 2 hrs.

Methods and materials related to teaching of jazz, including jazz ensemb rehearsal techniques, improvisation, jazz theory, and listening technique Prerequisite: graduate standing or consent of instructor. (Variable)

## 570:255. School Music Administration - 3 hrs .

Philosophy, management, and public relations techniques and proy cedures associated with administration of elementary and secondar music programs. Prerequisite: graduate standing or consent of instructoí (Variable)

## 570:257. Piano Pedagogy: Intermediate - 2 hrs.

Methods and materials related to teaching of the intermediate piand student including psychological development, repertory, tećnnique, the transfer student, and use of technology. Specific techniques related to teaching concept of artistry addressed. Observation of teaching required, (Variable)

## 570:258. Piano Pedagogy: Group and Adult - 2 hrs.

Materials and instructional techniques related to use of electronic piand lab, teaching of groups/class piano, and teaching adults. Exploration of curriculum planning and the benefits of group instruction in indepen dent studio, public school, and university. (Variable)
570:260. Piano Pedagogy: Internship - 1 hr.
Piano teaching assignments, determined in consultation with supervisol All students required to intern one semester with the group piano program where they observe and teach segments of the class. Other possibl internships include college secondary applied piano and demonstration laboratory. Teaching assignments include conferences with the superviso Evaluation through video tape, self-assignment and supervisor's critique. Students in M.M. Piano Performance and Pedagogy program must enroll for a total of three separate 1-hour internships. Corequisite: 570:148i $570: 149,570: 257$, or $570: 258$. (Variable)

## 570:275. Orff Overview and Pedagogy - 2 hrs.

Pedagogical and historical overview and introduction to approach techniques, and philosophy of Orff teaching model. Hands-on learnind experience in speech, song, instrumentarium, movement, and improvisay tion. (Variable)

## 570:276. Kodaly Overview and Pedagogy - 2 hrs.

Pedagogical and historical overview and introduction to approach, techniques, and philosophy of Kodaly teaching model. Hands-on learning experience in speech, song, instrumentarium, movement, and improvisation. (Variable)

## 570:277. Dalcroze Overview and Pedagogy - 2 hrs.

Pedagogical and historical overview and introduction to approach, techniques, and philosophy of Dalcroze teaching model. Hands-on learning experience in solfege, eurhythmics, and improvisation. (Variable)
570:278. The Eclectic Curriculum - 2 hrs.
Pedagogically developed to extract the most productive and prominent features of several methods into one formalized curricular structure. (Variable)

## 570:279. Classroom Management/Choral - 2 hrs.

Utilization of most productive and successful features of classroom management into one formalized structure via discipline strategies, lesson content, curriculum, and assessment. (Variable)

## 570:282. Seminar: Music Learning and Behavior - 3 hrs.

Exploration of behavioral, cognitive, and developmental theories affecting music teaching and learning. Required of graduate Music Education majors. (Variable)

## 570:285. Readings in Piano Pedagogy - 1-2 hrs.

Independent readings from a selected list as approved by piano pedagogy instructor and department head. (Variable)

## 570:285. Readings in Music Education - 1-3 hrs.

Readings in music education not normally covered in other courses. May be repeated for maximum of 3 hours. Prerequisite: consent of instructor. (Variable)
570:287. Measurement and Evaluation in Music - 3 hrs.
Study of the measurement and evaluation techniques for music aptitude and achievement. Emphasis on developing teacher-made tests and available standardized music tests. (Variable)

## 580 Music Theory

## 560:010. Introduction to Music Theory - 2 hrs.

Basic skills and vocabulary. For non-music majors with limited background in music fundamentals or as preparation for music major theory courses. Emphasis on notation, key/time signatures, rhythm, and aural training. (Variable)
500:011. Theory I - 2 hrs.
Fundamentals of basic musicianship; scales, intervals, and chord forms; and analysis and writing involving diatonic harmony. Creative use of materials. Corequisites: 580:015; 580:025. (Offered Fall)
580:012. Theory II - 2 hrs.
Continuation of 580:011. Prerequisite: 580:011 with grade of $C$ or higher, or placement by exam. Corequisites: 580:016; 580:026. (Offered Spring) 580:013. Theory III - 2 hrs.
Materials of musicianship; emphasis on the so-called period of "common practice." Prerequisite: 580:012 with grade of $C$ or higher, or placement by exam. Corequisites: 580:017; 580:027. (Offered Fall)
580:014. Theory IV - 2 hrs.
Continuation of $580: 013$ with emphasis on Late Romantic and Contemporary eras. Prerequisite: 580:013 with grade of C or higher, or placement by exam. Corequisites: 580:018; 580:028. (Offered Spring)
580:015. Aural Training 1-1 hr.
Corequisites: 580:011; 580:025. (Offered Fall)
580:016. Aural Training II - 1 hr .
Prerequisite: $580: 015$ with grade of $C$ or higher, or placement by exam. Corequisites: 580:012; 580:026. (Offered Spring)

## 580:017. Aural Training III - 1 hr.

Prerequisite: $580: 016$ with grade of $C$ or higher, or placement by exam. Corequisites: 580:013; 580:027. (Offered Fall)
580:018. Aural Training IV - $1 \mathbf{h r}$.
Prerequisite: $580: 017$ with grade of $C$ or higher, or placement by exam. Corequisites: 580:014; 580:028. (Offered Spring)
580:025. Sight-Singing I-1 hr.
Corequisites: 580:011; 580:015. (Offered Fall)
580:026. Sight-Singing II -1 hr.
Prerequisite: 580:025 with grade of $C$ or higher, or placement by exam. Corequisites: 580:012; 580:016. (Offered Spring)
580:027. Sight-Singing III -1 hr.
Prerequisite: 580:026 with grade of C or higher, or placement by exam. Corequisites: 580:013; 580:017. (Offered Fall)
580:028. Sight-Singing IV - 1 hr.
Prerequisite: 580:027 with grade of $C$ or higher, or placement by exam. Corequisites: 580:014; 580:018. (Offered Spring)
580:030. Composition Class - 2 hrs.
Acquaints students with the rudiments of compositional techniques. Designed for both major and non-major compositional study. Required of all beginning Composition-Theory majors. (Variable)
580:110. Analysis of Music - 2 hrs.
Study of forms and procedures prevalent in the works of major compos-
ers from 16th century to present. Prerequisite: 580:013. (Variable)
580:120(g). Sixteenth Century Counterpoint - 3 hrs.
Analysis of vocal polyphonic style of 16th century. Creative work in vocal forms; motet, madrigal, and mass. Prerequisites: 580:013; junior standing. (Variable)
580:121(g). Eighteenth Century Counterpoint - 3 hrs.
Contrapuntal technique and instrumental forms of 18th century. Analysis and creative work in representative forms. Prerequisites: 580:013; junior standing. (Variable)

## 580:122. Music and Technology - 2 hrs.

Overview of current applications in the music industry. Prerequisites: 580:012; 580:016; $580: 026$ with a grade of C or higher; or consent of instructor. (Formerly 580:022) (Variable)

## 580:126(g). Orchestration - 3 hrs.

Transcribing or composing for orchestra, band, smaller instrumental ensembles, voice with orchestra, voice with band, chorus with band, or orchestra for various levels. Prerequisites: 580:013; junior standing. (Variable)

## 580:127(g). Jazz Arranging I - 2 hrs.

Basic skills for jazz composer/arranger, including instrument ranges, transposition, chord terminology, voicing and doubling principles, harmonization, chord substitution, form, and score organization. Emphasis on writing for jazz combo instrumentation up to five horns. Prerequisites: 580:012; junior standing. (Offered Fall)

## 580:128(g). Jazz Arranging II - 2 hrs.

Continuation of $580: 127$. Emphasis on writing for full big band, including augmented instrumentation, contrapuntal and formal problems, score study, and analysis. Prerequisites: 580:127; junior standing. (Offered even Springs)

## 580:132(g). Jazz Composition Class - 1 hr.

The composition of jazz improvisation vehicles in lead sheet form. Includes attention to various compositional devices and the analysis of selected jazz compositions. Prerequisites: 560:152; 580:014; junior standing. (Variable)
580:180(g). Theory Survey for Graduates - 2 hrs.
Review of theoretical principles and methods of analysis. Required of all graduate students who do not demonstrate adequate proficiency as a result of the Graduate Theory Diagnostic Examination. Does not count toward minimum degree requirements. Prerequisite: junior standing. (Offered Fall)

## 580:210. Analytical Techniques I - 3 hrs.

Investigation of music from chant through 18th century. Examination of major composers and their works in historical context, emphasizing development of Western tradition. Prerequisite: 580:180 or passing score on Graduate Theory Diagnostic Examination. (Offered odd Springs)

## 580:211. Analytical Techniques II - 3 hrs.

Continuation of 580:210. Investigation of music written from 1800 to present day. Examination of major composers and their works in historical context, emphasizing development of Western tradition. Prerequisite: 580:180 or passing score on Graduate Theory Diagnostic Examination. (Offered even Springs)
580:250. Projects in Music Theory - 1-3 hrs.
(Variable)

## 590 Music History and Musicology

590:005. Introduction to Music Studies - 2 hrs.

Exploration of basic music concepts and repertories. Music listening techniques. (Offered Fall and Spring)
5s0:010. History of Music I-3 hrs.
Survey of musical trends from all eras. Early Christian era through Bach (1750). Prerequisite: 590:005. (Offered Fall and Spring)

590 Music History and Musicology/595 Performance Literature and Repertory/ 600 Art

590:011. History of Music II - 3 hrs.
Continuation of 590:010. Classical period to present. Prerequisite: 590:005. (Offered Fall and Spring)
590:110(g). Music History-Middle Ages and Renaissance - 3 hrs .
Prerequisites: 590:010; 590:011; junior standing. (Variable)
590:111(g). Music History-Baroque - 3 hrs.
Prerequisites: 590:010; 590:011; jumior standing. (Variable)
590:112(g). Music History-Classic - 3 hrs.
Prerequisites: 590:010; 590:011; junior standing. (Variable)
590:114(g). Music History-Romantic - 3 hrs.
Prerequisites: 590:010; 590:011; junior standing. (Variable)
590:115(g). Music History-20th Century - 3 hrs.
Prerequisites: 590:010; 590:011; junior standing. (Variable)
590:150(g). American Music - 3 hrs.
History of our nation's music from 1620 to present. Prerequisites: 590:011; junior standing. (Variable)
590:151(g). Music of World Cultures - 3 hrs.
Study of non-Western music: Africa, Islam, India, Indo-China, Indonesia, China, and Japan, and role of music in these cultures. Prerequisite: junior standing. (Variable)
590:160(g). Jazz History and Styles - 3 hrs.
Evolution of jazz styles and their relationship to social, economic, and political moods of the period; in-depth and detailed study of history and development of jazz in America. Prerequisite: junior standing. (Offered even Falls)
590:180(g). Music History Survey for Graduates - $\mathbf{1 - 2}$ hrs.
Review of various style periods, media, and forms in music history of our culture. Required of all graduate students who do not demonstrate adequate proficiency as a result of the Graduate Music History Diagnostic Examination. May be repeated for credit. Does not count toward minimum degree requirements. Prerequisite: junior standing. (Variable)
590:221. Music Research and Bibliography - 2 hrs.
Acquaints student with source materials in music and in locating thesis topic. Should be taken during first semester in residence by all graduate music students. (Offered Spring)
5s0:250. Projects in Music History and Literature - 1-3 hrs.
(Variable)
590:285. Readings in Music History - $\mathbf{1 - 3}$ hrs.
Prerequisite: consent of Graduate Coordinator in Music. (Variable)
590:289. Seminar in Music History - 3 hrs.
Musicological research into the various areas of music. (Variable)

## 595 Performance Literature and Repertory

595:120(g). Performance Literature: $\qquad$ -2 hrs.
Study of performance literature available for specific instrument or voice. Combination ensemble-literature course for the performer. Prerequisite: junior standing.
595:120(g)-01. Woodwinds. (Offered odd Springs)
595:120(g)-02. Brass. (Variable)
595:120(g)-03. Piano I. (Offered odd Falls)
595:120(g)-04. Piano II. (Offered even Springs)
595:120(g)-05. Organ. (Variable)
595:120(g)-06. Strings. (Variable)
595:120(g)-07. Percussion. (Variable)
595:120(g)-08. Voice I, Survey of Song Literature.
Survey of vocal literature, historical background, and style: 17th century through 20th century. Prerequisite: junior standing. (Offered Fall)
$595: 120(\mathrm{~g})-09$. Voice II, Art Song: German Language.
Study of vocal literature, historical background, style, and interpretation: chief composers of the German Lied, ca. 1750 (C.Ph.E.Bach) through

20th century. Non-performance. Prerequisites: 595:120-08; junior stand ing. (Variable)

## 595: $120(\mathrm{~g})-10$. Voice III, Art Song: English Language.

Study of vocal literature, historical background, style, and interpretatilie art song of the U.S., 18th century (Francis Hopkinson) through 20th century and British art song, 17th century (Henry Purcell) through 20th century. Non-performance. Prerequisites: 595:120-08; junior standis (Variable)
595:120(g)-11. Voice IV, Art Song: Other Modern Languages.
Study of vocal literature, historical background, style, and interpretation art song from selected countries/cultures including Belgium, Czechod vakia, France, Holland, Hungary, Italy, Latin America, Poland, RuseiScandinavia, Finland, Spain, and Switzerland. Non-performance. Prerey. uisites: 595:120-08; junior standing. (Variable)
$595: 120(\mathrm{~g})-12$. Voice V, Opera Literature. F
amiliarizes the student with a general survey of operatic literature as well as the stylistic differences among the respective composers. Prerequisity -595:120g-08; junior standing. (Variable)

## 595:129(g). American Music Theatre - 3 hrs .

Historical development of American music theatre from its roots in European forms and traditions to present day. Emphasis on stylistic traits of each style period. Prerequisite: junior standing. (Variable)
$595: 130(\mathrm{~g})$. History of Opera Literature - 3 hrs.
Development of opera from its inception (ca. 1600) to present. Prerequil site: junior standing. (Variable)
595:131(g). History and Literature of Large Choral Forms - 3 hrs.
Development of large choral forms from the Renaissance to presen Emphasis on the Mass, contata, oratorio, passion, anthem, and contem porary uses of the chorus. Prerequisite: junior standing. (Variable) $595: 140(\mathrm{~g})$. History and Literature of the Orchestra - 3 hrs .
Orchestral literature from mid-18th century to present. Emphasis on structure of the symphony as a form and growth of the orchestra as an ensemble. Prerequisite: junior standing. (Variable)
$595: 142(\mathrm{~g})$. History and Literature of the Wind Band - 3 hrs .
Growth and development of wind music from Gabrieli to present. Pre-1 requisite: junior standing. (Variable)

## 600 Art

600:002. Visual Inventions - 3 hrs.
Studio course: experiences in critical responses to the visual arts throurd active involvement with various creative processes and media; relation ship of the visual arts to other fields of human endeavor. (Offered Fall and Spring)
600:004. Visual Perceptions - 3 hrs.
Lecture course: experiences in critical responses to the visual arts through analyses of artworks and artistic processes; relationship of the visual arts to other fields of human endeavor. (Offered Fall and Spring)
600:018. Drawing I - 3 hrs.
Emphasis on growth in perception of visual form. Range of materials and subject matter. (Offered Fall and Spring)
600:019. Drawing II - 3 hrs.
Continuation of 600:018 with greater emphasis upon self-direction. Prerequisite: 600:018. (Offered Fall and Spring)
600:025. Graphic Design I-3 hrs.
Introduction to graphic design concepts and methods. Basics of typogral phy letter forms, layout, and print production. Prerequisite: the Foundal tions Program is a prerequisite for Art majors and minors only. (Offered Fall and Spring)
600:026. Two-Dimensional Concepts - 3 hrs.
Beginning experiences in conceiving and making in two dimensiond emphasis on interaction between work and idea, skills in art making, and common vocabulary of art. (Offered Fall and Spring)

600:027. Three-Dimensional Concepts - 3 hrs.
Beginning experiences in conceiving and making in three dimensions; emphasis on interaction between work and idea, skills in art making, and common vocabulary of art. (Offered Fall and Spring)

## 600:032. Creative Photography I - 3 hrs.

Introduction to use of photography as a means of creative expression. Basic camera operations, black and white processing and printing, and presentation methods. Assignments directed toward understanding photographic method and content. Prerequisite: the Foundations Program is a prerequisite for Art majors and minors only. (Offered Fall and Spring) 600:033. Printmaking I: Etching - 3 hrs.
Beginning experiences in fine art printmaking, concentrating on intaglio techniques. Prerequisite: the Foundations Program is a prerequisite for Art majors and minors only. (Offered Fall)
600:034. Printmaking I: Screenprint - 3 hrs.
Introduction to screenprinting processes. Prerequisite: the Foundations Program is a prerequisite for Art majors and minors only. (Formerly 600:112) (Offered Fall)
600:035. Printmaking I: Relief Processes - 3 hrs.
Beginning experiences in fine art printmaking, concentrating on relief processes including woodcut. Prerequisite: the Foundations Program is a prerequisite for Art majors and minors only. (Offered Spring)
600:036. Printmaking I: Lithography - 3 hrs.
Introduction to fine art printmaking, concentrating on lithographic processes and applications. Prerequisite: the Foundations Program is a prerequisite for Art majors and minors only. (Offered Spring)

## 600:037. Sculpture I - 3 hrs.

Introduction to essential methods and materials of sculpture, including modeling, carving, casting, and metal and wood fabrication techniques. Prerequisite: the Foundations Program is a prerequisite for Art majors and minors only. (Offered Fall and Spring)
600:040. Survey of Art History I - 3 hrs.
Introduction to history of art; Ancient through Medieval. (Offered Fall and Spring)
600:041. Survey of Art History II - 3 hrs.
Introduction to history of art; Renaissance through Modern. (Offered Fall and Spring)

## 600:050. Ceramics I-3 hrs.

Introduction to basic techniques for forming and finishing ceramic objects. Development of handbuilding and wheelthrowing skills contributing to creative exploration. Assignments directed toward understanding both functional and sculptural aesthetic concerns. Prerequisite: the Foundations Program is a prerequisite for Art majors and minors only. (Offered Fall and Spring)
600:060. Performance Art - 3 hrs.
Emphasis on action over object production; exploration of interdisciplinary art making in real space and time as means of creative expression; examination of various approaches to performance including Dada, Fluxus, Japanese Butoh, and Conceptualism. Prerequisite: the Foundations Program is a prerequisite for Art majors and minors only. (Offered Fall)
600:074. Jewelry/Metals I - 3 hrs.
Forming, joining, decorating, and combining precious and non-precious metals with other materials. Prerequisite: the Foundations Program is a prerequisite for Art majors and minors only. (Offered Fall and Spring) 600:000. Painting I - 3 hrs.
Experience in various painting media. Prerequisite: the Foundations Program is a prerequisite for Arts majors and minors only. (Offered Fall and Spring)
600:090. Art and the Child - 3 hrs.
Primarily for elementary education student with little or no experience or knowledge of art. Study of psychological and artistic development of elementary school student with emphasis on creativity within elementary
school and art curriculum. (Offered Fall and Spring)
600:091. Elementary Art Education I-2 hrs.
Philosophy and methods of art education in grades PK-6 with emphasis on creating multicultural curriculum. Exploration of ways in which children learn and develop in the visual arts. Requires field experience. Prerequisite: Foundations Program. Corequisite: Level I in the Professional Education Requirements, or consent of instructor. (Offered Fall)
600:093. Secondary Art Education I-3 hrs.
Content, methods, scope, and sequence of instruction for teaching art in grades 7-12. Relating educational theory and strategies to visual art experiences. Exploration of ways to integrate studio art with art history, art criticism, aesthetics, and multiculturalism. Requires field experience. Prerequisites: 600:091; 600:120. Corequisite: Level II of Professional Education Requirements, or consent of instructor. (Offered Fall)
600:108. Principles and Techniques of Arts Management I - 3 hrs.
Study of varied aspects of arts management including operating policies, facilities, staffing, and fund raising. Development of skills and knowledge necessary for basic understanding of arts management. (Variable)
600:109. Principles and Techniques of Arts Management II - 3 hrs.
Continuation of $600: 108$. Examination of areas such as grantsmanship, legal issues, contracts, and budgets as they affect various arts institutions. Prerequisite: 600:108. (Variable)

## 600:110. Art Gallery and Museum Management - 3 hrs.

Exploration of particular management problems of art museum operations, including role of museum institution as public trust: object management, care and policy; exhibition curatorship and design; museum educational components; and accreditation procedures and professional standards. Exploration of history of the development of museums. (Variable)

## 600:111. Life Drawing - 3 hrs.

Drawing from model using variety of media. May be repeated for credit. Prerequisite: 600:019. (Variable)
600:118. Drawing Ili - 3 hrs.
Prerequisite: 600:019 or 600:111. (Offered Fall and Spring)
600:120. Elementary Art Education II - 3 hrs.
Emphasis on application of theory to practice in elementary art curriculum. Function of interdisciplinary approach, critical analysis, and multicultural scope in teaching practice. Increased concentration on children's aesthetic development as revealed in field experience. Introduction to use of computer as teaching resource. Prerequisite: 600:091. (Offered Spring)
600:121. Secondary Art Education II - 2 hrs.
Continuation of 600:093 with emphasis on the development of a teaching philosophy and methods of assessment. Preparation of a teaching portfolio and development of teaching unit. Requires field experience. Prerequisite: 600:093. (Offered Spring)
600:124. Jewelry/Metals II - 3 hrs.
Continuation of 600:074 with greater emphasis on self-direction. Contemporary jewelry/metals history, electro-forming, anodization of aluminum and advanced stone setting. Prerequisite: 600:074. (Offered Fall and Spring)
600:125. Graphic Design II - 3 hrs.
Exploration of approaches to illustration and integration of type and graphic images; class problems and design projects for university and community. Prerequisite: 600:025. (Offered Fall and Spring)

## 600:126. Graphic Design III - 3 hrs.

Advanced problems in graphic design. Design systems, corporate identity packaging, and signage. Prerequisite: 600:125. (Offered Fall and Spring) 600:127. Publication Design - 3 hrs.
Lecture-studio course on layout and typography of various types of publications; content research and analysis, display, text type and illustration trends, design formats, and specialized publications and audiences. Pre-
requisite: 600:125. (Offered Fall)

## 600:128. Graphic Design-Illustration - 3 hrs.

Basic media, techniques, paper selection, and tools for execution of solutions ranging from black and white line to full-color, continuous tone in 2-D and 3-D form. Consideration of specialized commercial illustration problems imposed by mechanical production requirements. Historical overview of styles. Prerequisite: 600:125. (Variable)

## 600:129. Typography - 3 hrs.

Exploration of development of typography as an art form; study of historical development, anatomy of type, and compositional considerations in typography selections. Emphasis on aesthetic use as a design element.
Prerequisite: 600:125. (Offered Spring)
600:130. Creative Photography II - 3 hrs .
Continuation of $600: 032$ with emphasis on development of individual's ideas and directions; introduction to view camera, studio lighting, com-puter-generated imagery, and presentation and exhibition techniques. Prerequisite: 600:032 or equivalent. (Offered Fall and Spring)
600:131. Creative Photography III - 3 hrs.
Extension of photography as creative image-making; in-depth look at processes, criticism, and student's own ideas and directions in photography. Prerequisite: 600:130. (Offered Fall and Spring)

## 600:132. Color Photography - 3 hrs.

Introduction to most commonly-used color photographic processes including transparency film, negative films, negative and reversal printing papers. Prerequisite: 600:130 or equivalent. (Offered Spring)
600:134. Printmaking II - 3 hrs.
Intermediate work in fine art printmaking. Etching, screen printing, relief processes, lithography, and related processes. In-depth exploration of stu-dent-selected processes. Prerequisites: any two of the following: 600:033, 600:034, 600:035, or 600:036. (Offered Fall and Spring)
600:136. Printmaking Il: Photo and Computer Processes - 3 hrs .
Experimentation with use of photo techniques and computer technology in various processes of printmaking. No photo experience necessary. Prerequisites: any two of the following: 600:033, $600: 034,600: 035$, or 600:036. (Variable)

## 600:137. Sculpture II - 3 hrs.

Exploration of contemporary issues in sculpture through materials and processes selected by the individual. Emphasis on understanding interrelationships between specific concepts, forms, and materials. Prerequisite: 600:037. (Offered Fall and Spring)
600:138. Research Methods and Writing in Art History - 2 hrs.
Introduction to research methods and writing in art history. Cannot be used to satisfy art history requirements in the studio or art education emphases. Prerequisite: completion of Foundations Program. (Offered even Falls)
600:139(g). Ancient Near Eastem Art - 3 hrs.
Examination of various developments in the Ancient Near East (e.g., Mesopotamia, Anatolia, and the Levant, from formative periods to first millennium, primarily through art and architecture). Prerequisite for non-art majors and minors: junior standing. Prerequisites for Art majors and minors: 600:040; 600:041; junior standing. (Variable)
600:140(g). Ancient Egyptian Art - 3 hrs.
Examination of Egyptian culture from early phases of Pre-Dynastic to first millennium, primarily through art and architecture. Prerequisite for non-art majors and minors: junior standing. Prerequisites for Art majors and minors: 600:040; 600:041; junior standing. (Variable)
600:141(g). Art History - 3 hrs.
600:141(g)-01 Medieval Art.
Examination of various developments in Europe and Western Asia from Late Roman through Gothic, primarily through art and architecture. Prerequisite for non-art majors and minors: junior standing. Prerequisites for Art majors and minors: 600:040; 600:041; junior standing. (Variable)

## 600:141(g)-02 Northern Renaissance Art.

Examination of Northern European art from the 14th-16th centuriv Prerequisite for non-art majors and minors: junior standing. Preret uisites for Art majors and minors: 600:040; 600:041; junior standiuz (Variable)

## 600:141(g)-03 Indian Art.

Examination of art and culture of India from Indus Valley Civilizatid through Mughal Dynasty. Prerequisite for non-art majors and minors: jur nior standing. Prerequisites for Art majors and minors: 600:040; 600:041 junior standing. (Variable)

## 600:141(g)-04 Japanese Art.

Examination of art and culture of Japan from Neolithic through Tokugy wa periods. Prerequisite for non-art majors and minors: junior standire Prerequisites for Art majors and minors: 600:040; 600:041; junior stand ing. (Variable)

## 600:141(g)-05 Ancient Greek Art.

Examination of various developments in the Greek world from Bronyd Age through Hellenistic Period, primarily through art and architectur Prerequisite for non-art majors and minors: junior standing. Prere uisites for Art majors and minors: 600:040; 600:041; junior standin (Variable)

## 600:141(g)-06 Ancient Roman Art.

Examination of various developments in the Roman world, from Etrus can through Roman Imperial, primarily through art and architecturt Prerequisite for non-art majors and minors: junior standing. Prere uisites for Art majors and minors: 600:040; 600:041; junior standin (Variable)
600:141 (g)-07 Chinese Art.
Examination of art and culture of China from Neolithic Period througl Qing Dynasty. Prerequisite for non-art majors and minors: junior standil ing. Prerequisites for Art majors and minors: 600:040; 600:041; junic standing. (Variable)

## 600:142(g). Italian Renaissance Art - 3 hrs .

History of 14 th, 15 th, and 16 th century Italian art. Prerequisite for nons art majors and minors: junior standing. Prerequisites for Art majors and minors: 600:040; 600:041; junior standing. (Variable)

## 600:144(g). Baroque and Rococo - 3 hrs.

History of Baroque and Rococo art in 17th and 18th century Europe. Pren requisite for non-art majors and minors: junior standing. Prerequisit for Art majors and minors: 600:040; 600:041; junior standing. (Variabl
600:146(g). 19th Century European Art - 3 hrs.
Napoleonic art to Art Nouveau. Prerequisite for non-art majors and mis nors: junior standing. Prerequisites for Art majors and minors: 600:04. 600:041; junior standing. (Variable)

## 600:147(g). Asian Art - 3 hrs.

Introduction to the arts of India, Southeast Asia, China, and Japan. Prey requisite for non-art majors and minors: junior standing. Prerequisí for Art majors and minors: 600:040; 600:041; junior standing. (Variable) 600:151(g). Early 20th Contury Art - 3 hrs.
Art from 1900 to mid-20th century. Prerequisite for non-art majors and minors: junior standing. Prerequisites for Art majors and minors: 600:044 600:041; junior standing. (Variable)

## 600:152(g). Late 20th Century Art - 3 hrs.

Art since mid-20th century. Prerequisite for non-art majors and minor junior standing. Prerequisites for Art majors and minors: 600:040; 600:04 junior standing. (Variable)
600:153(g). History of Photography - 3 hrs.
Survey of history and evolution of photography since its invention in 1839 to present day. Prerequisite for non-art majors and minors: junic standing. Prerequisites for Art majors and minors: 600:040; 600:041; junior standing. (Offered even Falls)

## 600:154(g). History of Design - 3 hrs.

Overview of European and American design since 1850. Primary emphasis on graphic design, with secondary focus on architectural and industrial design. Prerequisite for non-art majors and minors: junior standing. Prerequisites for Art majors and minors: 600:040; $600: 041$; junior standing. (Offered odd Falls)
600:161. Ceramics II - 3 hrs.
Continuation of 600:050 with further development of student's understanding of firing techniques and formulation of clay and glazes. Prerequisite: 600:050. (Formerly 600:051) (Offered Fall and Spring)
600:162. Painting II, -3 hrs.
Continuation of 600:080 with greater emphasis upon self-direction. Prerequisite: 600:080. (Formerly $600: 081$ ) (Offered Fall and Spring)

## 600:170. Jewelry/Metais Ill - 3 hrs.

Continuation of $600: 124$ with greater emphasis on self-direction. Techniques include raising, lathe usage, metal inlay, engraving, mokume, granulation, and leaf metal application. Prerequisite: 600:124. (Offered Fall and Spring)
600:171(g). Ceramic Raw Materials and Glaze Calculations - 3 hrs.
In-depth understanding of origins and use of ceramic materials in making art. Development of clay bodies and formulation of glazes. Discussion of health and safety concerns when using ceramic materials in studio or classroom. Prerequisite: 600:161; junior standing. (Variable)

## 600:172. Ceramics III - 3 hrs.

Focused exploration of lowfire, mid-temperature, and highfire ceramics techniques. Emphasis on development of individual's ideas and direction, and relating personal aesthetic concerns to historical and contemporary ' work. Prerequisite: 600:161. (Offered Fall and Spring)
600:174. Printmaking III-3 hrs.
Advanced work in printmaking. Etching, screen printing, relief processes, lithography, and related processes. In-depth exploration of student-selected processes. Emphasis on the development of individual interest and direction. Prerequisite: 600:134 or 600:136. (Offered Fall and Spring)
600:175. Undergraduate Studio - 1-6 hrs.
Investigation of personal visual concepts and techniques in a given studio area for qualified students who demonstrate intensive involvement and seek professional competency. Individual instruction. Sections: 1. Ceramics; 2. Drawing; 3. Graphic Design; 4. Jewelry/Metals; 5. Painting; 7. Photography; 8. Printmaking; 9. Sculpture; 10. Watercolor. Credit determined by instructor at time of registration. May be repeated for credit. Prerequisites: 9 hours in studio area chosen; consent of instructor. (Offered Fall and Spring)

## 600:177. Sculpture III - 3 hrs.

Focused exploration of concepts and media which reflect interests of student. Emphasis on developing a personal aesthetic and conceptual and critical base for continued work. Prerequisite: 600:137. (Offered Fall and Spring)
600:180. Painting III - 3 hrs.
Prerequisite: 600:162. (Offered Fall and Spring)
600:189. B.FA. Exhibition - no credit.
(Offered Fall and Spring)

## 600:191. Art History Seminar - 3 hrs.

Focused investigation on topic or topics related to a specific area or time covered in general art history courses. For non-art major: junior standing; completion of 100 -level courses in area of study pertinent/related to seminar; consent of instructor. Prerequisites for Art majors and minors: completed Foundations Program; minimum of three 100 -level art history courses, including one pertinent to seminar; consent of instructor. (Variable)
600:192. B.F.A. Seminar: Critical Issues in Contemporary Art - 2 hrs.
Critical analysis and discussion of contemporary art. May be repeated once for credit. Prerequisites: admission to the B.F.A. degree program; ju-
nior standing; or consent of department head. (Offered Fall and Spring) 600:194(g). Professional Practices - 3 hrs.
Career preparation for the contemporary visual artist, designer, art educator, or art historian; preparation for graduate school, and professional roles and responsibilities. Prerequisite: junior standing. (Offered Fall and Spring)
600:196. B.F.A. Project I - 3 hrs.
Investigation of individual concepts and techniques in studio preparation for Bachelor of Fine Arts exhibition. Prerequisites: admission to B.F.A. program; senior standing, consent of instructor. (Offered Fall and Spring)
600:197. B.F.A. Project II - 3 hrs.
Investigation of individual concepts and techniques culminating in professional Bachelor of Fine Arts exhibition. Prerequisites: 600:196; consent of instructor; B.F.A. exhibition must be scheduled concurrently. (Offered Fall and Spring)

## 600:198. Independent Study.

(Offered Fall and Spring)
600:275. Graduate Studio.
Investigation of personal visual concepts and techniques in a given studio area for qualified students who demonstrate intensive involvement and who seek professional competency. Individual instruction. Credit determined at time of registration. May be repeated for credit. Sections: 1. Ceramics; 2. Drawing; 3. Graphic Design; 4. Jewelry/Metals; 5. Painting; 6. Photography; 7. Printmaking; 8. Sculpture. Prerequisite: consent of Chairperson, Graduate Studies in Art. (Offered Fall and Spring)
600:280. Seminar: Critique and Analysis - 2 hrs.
Critical analysis and discussion of contemporary art. May be repeated for maximum of 4 hours. (Offered Fall and Spring)
600:295. Seminar in Teaching Art - 3 hrs.
Specific art education relating to public schools with emphasis on continuity of art activity. Satisfies the special methods elective for the professional core. (Variable)
600:297. Practicum.
(Variable)
600:299. Research.
(Offered Fall and Spring)

## 620 English Language and Litterature

620:002. College Writing Basics - 3 hrs.
Prepares students with limited writing experience for $620: 005$; recommended for students who have ACT English scores of 17 or less. Emphasis on reading and writing a variety of increasingly-complex expository texts. Attention to developing and organizing ideas, revising, editing, and adapting written discourse for readers. Does not meet the Liberal Arts Core writing requirement; does not count toward minimum hours required for baccalaureate degree. No credit if prior credit in another college writing course. May be used to help satisfy UNI's high school English admissions requirement. (Variable)
620:005. College Reading and Writing - 3 hrs.
Recommended for students who have ACT English and Reading scores of 18-26; students who have ACT English scores of 17 or less are advised to take 620:002 first. Emphasis on critical reading and the writing of a variety of texts with attention to audience, purpose, and rhetorical strategies. Attention to integrating research materials with students' critical and personal insights. Satisfies the Liberal Arts Core writing and reading requirement. No credit if prior credit in 620:015 or 620:034. Prerequisite: UNI's high school English admissions requirement. (Offered Fall, Spring, and Summer)

## 620:015. Exposition and Report Writing - 3 hrs.

Conducting source-based research in the academic disciplines; writing and editing research reports; and using writer's handbook and style manual to prepare scholarly manuscripts. Satisfies the Liberal Arts Core writing and reading requirement. Prerequisite: combined ACT English and Reading scores of 54 or above, or 620:005, or consent of department. (Offered Fall and Spring)

## 620:020. Science Fiction - 3 hrs.

Development of modern science fiction. Current trends; and parallels and contrasts between science fiction and "literary" fiction. Prerequisite: 620:005. (Variable)

## 620:031. Introduction to Literature - 3 hrs.

Understanding and appreciation of the basic forms of literature through close reading of literary texts, including works originally written in English. An option in the Liberal Arts Core; does not count for credit on any English Department major or minor unless otherwise noted. No credit if prior credit in 620:034. (Offered Fall and Spring)
620:034. Critical Writing About Literature - 3 hrs.
Study of techniques of various literary forms including poetry, drama, and fiction. Attention to processes and purposes of critical and scholarly writing and to documentation. Introductory course for English Department majors and minors. Prerequisite: combined ACT English and Reading scores of 54 or above, or 620:005. (Offered Fall and Spring)
620:035. Introduction to Film - 3 hrs.
Examination at introductory level of four film genres: narrative, documentary, animated, and experimental; preparation for further work, either individually or academically, Prerequisite: 620:005. (Variable)
620:040. Multicultural Literature - 3 hrs .
Selected texts from multicultural literatures of the United States (e.g., African American, Asian American, Hispanic American, Jewish American, Native American); may also include texts from postcolonial literatures. Prerequisites: 620:005 or 620:015 or 620:034. (Offered Fall and Spring)
620:042. Survey of English Literature to Early Modernity - 3 hrs.
Broad historical, cultural, theoretical, and formal consideration of artful expressions by English speaking peoples from the earliest documentary witnesses through early modernity. Prerequisite or corequisite: 620:034. (Offered Fall and Spring)

## 620:043. Survey of English Literature: Romantics to Post-Colonialism

 - $\mathbf{3}$ hrs.Broad historical, cultural, theoretical, and formal consideration of artful expressions by English speaking peoples from the British Romantic Movement to contemporary world writing. Prerequisite or corequisite: 620:034. (Offered Fall and Spring)

## 620:053. Survey of American Literature - 3 hrs.

Historical, cultural, theoretical, and/or formal study of literature from the geographical area that has become the United States. Genres may include drama, fiction, film, non-fiction, poetry, and other literary and cultural texts. Prerequisite or corequisite: 620:034. (Offered Fall and Spring)
620:055. Native American and Chicano Literature - 3 hrs.
Introductory study of selected American Indian and Chicano literature in a variety of forms: fiction, poetry, drama, myth, and legend. Prerequisite: 620:005. (Variable)

## 620:050. Tradition of European Literature to 1650 - 3 hrs .

Masterpieces of Western literature from the beginnings to 1650 . Prerequisite: 620:005. (Variable)

## 620:070. Beginning Poetry Writing - 3 hrs.

Attention to fundamental elements of poetry - image, metaphor, rhythm, meter, and word-music - through reading and writing. Prerequisite: 620:005. (Offered Fall and Spring)

## 620:071. Beginning Fiction Writing - 3 hrs.

Attention to fundamental elements in the writing of fiction including setting, narration, plot, characterization, and-dialogue. Prerequisite:

620:005. (Offered Fall and Spring)
620:077. Introduction to Professional Writing - 3 hrs.
Emphasis on careers in professional writing; includes history of the profession, career options, professional responsibilities, key theoreticat perspectives, lab experiences with industry-standard communicatime technologies. Prerequisite or corequisite: 620:005. (Offered Fall)
620:102(g). Designing Reports - 3 hrs.
Examining and designing research reports; using designer=s resources to prepare professional manuscripts; conducting research using publishet sources. Prerequisite or corequisite: 150:080 or 620:077 and junior stand ing, or consent of instructor. (Variable)
620:103. The Personal Essay - 3 hrs.
Writing various types of essays (e.g., narrative, descriptive, expositor) and persuasive); attention to stylistic questions and possibilities. Prea requisites: 620:005 or 620:015 or 620:034; junior standing or consent of instructor. (Offered Fall and Spring)
620:104(g). Designing Proposals - 3 hrs.
Examining, writing, and designing persuasive documents for profession 1 settings: analyses, reviews, and evaluation; problem-analysis-recommeth dation reports; and proposals. Prerequisites: 150:080 or 620:077 and junior standing, or consent of instructor. (Variable)

## 620:105 (g). Designing Manuals and Handbooks - 3 hrs .

Examining, writing, and designing manuals, handbooks, and simil professional documents with emphasis on definitions, instructions, and document testing. Prerequisites: 150:080 or 620:077, and junior standine or consent of instructor. (Variable)

## 620:106(g). Scientific and Technical Writing - 3 hrs.

Designing scientific and technical documents. Emphasizes audience and purpose, team work, layout/design, and professionalism. Topics incluc. correspondence, specifications, proposals, reports, data and graphics, and web documents. Prerequisites: 620:005 and junior standing, or consent of instructor. (Variable)

## 620:107(g). Professional Editing - 3 hrs.

Examination of editing strategies and responsibilities in scholarly and professional settings. Emphasis on understanding of editing resource editor roles in document development, and the politics of grammar and style. Prerequisites: 620:077 and junior standing, or consent of instructili (Variable)
620:108(g). Craft of Poetry - 3 hrs.
Written exercises in forms, patterns, and techniques of poetry. Readin in poetry, including contemporary poetry, with particular attention to poetic structures and strategies. Prerequisites: 620:070 or consent of instructor; junior standing. (Variable)
620:109(g). Craft of Fiction - 3 hrs.
Written exercises in forms, patterns, and techniques of fiction. Readingalie fiction with particular attention to narrative structures and strategies. Pred requisites: 620:071 or consent of instructor; junior standing. (Variable)
620:113(g). Early Modern Drams - 3 hrs.
Emphasis on contemporaries of Shakespeare such as Marlowe, Jonso and Webster; includes selected premodern, Restoration, and 18th- all 19th-century dramas. Prerequisites: 620:034 or consent of instructet junior standing. (Variable)

## 620:115(g). Modern Drama - 3 hrs.

Twentieth-century American, British, and European drama to 1945; mat include drama from other cultures. Prerequisites: 620:034 or consent a instructor; junior standing. (Variable)

## 620:116(g). English Renaissance - 3 hrs.

Non-dramatic literature of the English Renaissance, 1485-1660. Prereq sites: 620:034 or consent of instructor; junior standing. (Variable)
$620: 117(\mathrm{~g}) .18 \mathrm{th}$-Century British Literature - 3 hrs.
Major writers of satire, verse, and prose including Dryden, Swift, Pop and Johnson. Prerequisites: 620:034 or consent of instructor; junior

## standing. (Variable)

620:118(g). British Romantic Writers - 3 hrs.
Focus on the poetry and prose of the Lake Poets (Wordsworth and Coleridge) members of the Joseph Johnson circle (Wollstonecraft, Godwin, and Blake), and the Leigh Hunt circle (Byron, Keats, and the Shelleys). Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)

## 620:119(g). British Victorian Writers - 3 hrs.

Focus on the poetry and prose of major writers (e.g., Tennyson, Browning, Arnold, and Ruskin), as well as on members of "The Fleshly School of Poetry" (the Pre-Raphaelites and Swinburne) and the Aesthetics (Wilde and his circle). Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)

## 620:120(g). 20th-Century British Novel - 3 hrs.

Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
620:121(g). The American Renaissance - 3 hrs .
U.S. writers of the mid-1800s such as Hawthorne, Melville, Emerson, Stowe, Douglass, and Thoreau; attention to literary engagements with controversial reforms including the anti-slavery, labor, and women's movements. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
620:123(g). American Realism and Naturalism to WWI - 3 hrs.
Literary selections 1870 to World War I; emphasis on fiction. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
$620: 124(\mathrm{~g})$. 20th-Century American Novel - 3 hrs.
Prerequisites: 620:034 or consent of instructor; junior standing. (Variable) 620:126(g). Short Fiction - 3 hrs.
Prerequisites: 620:034 or consent of instructor; junior standing. (Variable) 620:128(g). Images of Women in Literature - 3 hrs.
Images, symbols, and -myths of women in literature; feminist criticism. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
620:134(g). Modern British and American Poetry - 3 hrs.
Since 1914. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)

## 620:139(g). Film and Literature - 3 hrs .

Attention to cinematic adaptations of various literary prose works; aesthetic, cultural, genre, and other factors that influence adapting print to film media. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)

## 620:142(g). Film History - 3 hrs.

Survey of artists, historical movements, and styles from silent and sound eras; focus on Classical Hollywood and its alternatives (Soviet, Italian Neorealism, French New Wave, and New German Cinema). Prerequisites: 620:034 or 620:035 or consent of instructor; junior standing. (Variable)

## 620:144(g). Chaucer - 3 hrs.

Poetry of Chaucer; may include other medieval writers. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)

## 620:147(g). Milton - 3 hrs.

Milton's major English poetry and prose. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
620:148(g). Shakespeare - 3 hrs.
Advanced study of selected plays and poems in historical and biographical contexts as well as in terms of the history of Shakespeare studies. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
620:150(g). Author Seminar: $\qquad$ - 3 hrs.

Intensive study of one or more authors, canonical or non-canonical; may focus on lesser-read texts and genres. Topic listed in semester Schedule of Classes. May be repeated for credit on different topics. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
$020: 151(\mathrm{~g})$. Early American Literature - 3 hrs .
Diverse literary and cultural expressions of the American experience from
early European contact through the 1820 s. Genres include autobiography, religious writing, captivity narrative, poetry, and the novel. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
620:153(g). American Poetry to 1914 - 3 hrs.
Examination of selected elite and popular traditions in American poetry from the colonial period to the stirrings of modernism. Includes extended discussion of Whitman and Dickinson in their literary, cultural, and theoretical contexts. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)

## 620:155(g). European Novel - 3 hrs .

Major works of prose fiction (in English translation) by writers such as Cervantes, Stendhal, Flaubert, Dostoevsky, Tolstoy, and Mann. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
620:156(g). British Novel to 1900-3 hrs.
Major fiction writers such as Fielding, Sterne, Austen, Dickens, Thackeray, the Brontes, George Eliot, and Hardy. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
620:157(g). African American Literature - 3 hrs.
Study of African American literature in a variety of forms and genres: Black Vernacular (spirituals, blues, jazz, and folktales), slave narratives, poetry, fiction, drama, film, and autobiography. Prerequisites: 620:034 or 620:040 or consent of instructor; junior standing. (Variable)
620:158(g). Asian American Literature - 3 hrs.
Texts by North American writers of Asian descent, selected from fiction, drama, poetry, memoirs, oral history, and film. Attention to significant themes, literary innovations, and cultural sensitivity in reading and interpreting ethnic literature. Prerequisites: 620:034 or 620:040 or consent of instructor; junior standing. (Variable)
620:161(g). Literary Criticism - 3 hrs.
Important modern and traditional critical positions and their application to imaginative literature. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)
620:163(g). Theory and Practice of Writing - 3 hrs.
Detailed examination and application of major theories of writing: formal , cognitive, social, expressive, rhetorical, and contextual. Prerequisites: 620:005 or 620:015 or 620:034; junior standing. (Variable)
620:165(g). Literature for Young Adults - $\mathbf{3}$ hrs.
Reading and evaluation of literature suitable for adolescents. Prerequisites: 620:034 or consent of instructor; junior standing. (Offered Fall, Spring, and Summer)

## 620:168(g). Teaching Media Literacy - 3 hrs.

Theory and practice of teaching media literacy skills; attention to integrating the study of media into existing language arts curricula. Prerequisite: junior standing. (Variable)

## 620:172(g). Literary Nonfiction - 3 hrs.

Study of artful texts about actual people, places, and events: selected from memoirs and autobiographies, biographies, histories, journalism, nature, travel, science, and essay writing. Attention to techniques used in creative nonfiction and to issues of accuracy, privacy, and "truth." Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)

## 620:174(g). Poetry Workshop - 1-6 hrs.

Advanced peer workshop focusing on relevant genres, techniques, and poets, with emphasis on the contemporary poetic situation. May be repeated for maximum of 9 hours. Prerequisites: 620:108 or consent of instructor; junior standing. (Variable)

## 620:175(g). Fiction Workshop - 1-6 hrs.

Advanced peer workshop focusing on refining techniques of fiction writing and on contemporary fiction. May be repeated for maximum of 9 hours. Prerequisites: 620:109 or consent of instructor; junior standing. (Variable)
620:177(g). Project Management - 3 hrs.
Individuals and teams develop, design, and produce professional docu-
ments for clients. Topics include project planning, resource management, and budget development. Prerequisites: 620:102; 620:104; 620:105; 620:107; junior standing; or consent of instructor. (Variable)
620:182(g). Film Theory and Criticism - 3 hrs.
Survey of major approaches to cinema including both the early schools (Realist, Genre Studies, and Auteurist) and the post-structural explosion (Marxist, Psychoanalytic, and Contextual Studies). Prerequisites: 620:034 or 620:035 or consent of instructor; junior standing. (Variable)
620:184(g). Sexed/Gendered Literature - 3 hrs.
Exploring cultural constructions of gender and sexuality in literature; may include other media. Special topic may be listed in Schedule of Classes. May be repeated for credit on different topics. Prerequisite: junior standing. (Variable)
620:188(g). Seminar in Literature: $\qquad$ -3 hrs.
Topic listed in Schedule of Classes. May be repeated for credit on different topics. Prerequisites: 620:034 or consent of instructor; junior standing. (Variable)

## 620:190(g). The Teaching of English - 3 hrs.

Preparation for teaching secondary English (7-12); teaching of literature and media, reading and writing, and speaking and listening; attention to curriculum design, language development and use, and evaluation. Prerequisites: 200:128; 200:148; 250:150; junior standing. (Offered Fall and Spring)
620:191(g). Seminar for the Student Teacher - 1 hr .
Intensive course to integrate 620:190 with the student teaching experience. Offered on credit/no credit basis only. Prerequisite: junior standing.
Corequisite: 280:138. (Offered Fall and Spring)
$620: 193(\mathrm{~g})$. The Teaching of Writing - 3 hrs .
Theory, research, and practice in teaching the composing, revising, and editing of written discourse for various audiences and purposes; attention to development of writing and language abilities, course design, and implementation and evaluation strategies. Prerequisites: 620:005 or consent of instructor; junior standing. (Offered Fall and Spring)
620:194. Practicum: Tutoring Writing - 3 hrs.
Training in processes of writing and techniques of tutoring writing; application of training to tutoring students in writing skills and writing projects. Prerequisites: 620:005; sophomore standing; consent of instructor. (Variable)
620:195(g). Seminar in Teaching College Writing - 3 hrs.
Preparation to teach introductory college writing; focus on designing syllabi, planning classes, and creating writing assignments. Attention to theoretical issues that inform classroom practice. Prerequisites: senior standing; consent of instructor. (Offered Fall)
620:197(g). Professional Writing Practicum - 1-6 hrs.
Students undertake individual, supervised writing, editing, and document preparation assignments outside the classroom environment. Assignments vary. May be repeated for maximum of 6 hours. Prerequisites:
620:177; junior standing. (Variable)
620:198. Independent Study.
(Offered Fall and Spring)
620:201. Introduction to Graduate Study in English - 3 hrs.
Introduction to problems, techniques, and tools of graduate-level study and research in English. (Offered Fall)
620:206. Feminist Litarary Theorias and Practice - 3 hrs.
Examination of how writers transform society's beliefs about the nature and function of women into literary plots, images, and themes, and how, in turn, these influence society's attitudes toward women. Emphasis on socio-historical approaches prevalent in the United States; attention to British political and French psychoanalytic critics. Prerequisite or corequisite: 620:201 or 680:289 or consent of instructor. (Variable)

## 620:207. Tha English Curriculum - 3 hrs.

Theories behind teaching of English and trends in curriculum methods
and materials, particularly in secondary English. Prerequisite or corequil site: 620:201. (Variable)

## 620:208. Contemporary Literary Theory - 3 hrs.

Attention to major developments such as semiotics, psychoanaly post-structuralism, post-modernism, reception theory, multiculturil and postcolonial studies, feminism, and gender studies. Prerequisite or corequisite: 620:201. (Variable)
620:220. Medieval English Literature - 3 hrs.
Examination of how medieval English writers transform the culturel social, theological, philosophical, and ideological experiences of mediev society into literary language, structures, themes, and genres. Literaf texts read in the original Old English or Middle English or in moder English translation. Topic listed in Schedule of Classes. Prerequisite or corequisite: 620:201. (Variable)
620:221. English Renaissance Literature - 3 hrs.
(1485-1660). Prerequisite or corequisite: 620:201. (Variable)
620:223. Restoration and 18th Century English Literature - 3 hrs.
(1660-1798). (Variable)
620:225. 19th Century English Literature - 3 hrs.
(1798-1900) Romantic or Victorian. (Variable)
620:226. Modern English Literature - 3 hrs.
(1900-1945). Prerequisite or corequisite: 620:201. (Variable)
620:231. American Romantic Literature - 3 hrs .
(1800-1870). Prerequisite or corequisite: 620:201. (Variable)
620:232. American Realism and Naturalism - 3 hrs.
(1870-1912). Prerequisite or corequisite: 620:201. (Variable)
620:234. Modern American Literature - 3 hrs.
(1912-1945). Prerequisite or corequisite: 620:201. (Variable)
620:260. Contemporary Literature -3 hrs .
Literature from 1945 to present; may include poetry, drama, and/or fic tion. Prerequisite or corequisite: 620:201. (Variable)

## 620:264. European Literature - 3 hrs.

Prerequisite or corequisite: 620:201. (Variable)
620:284. Seminar in Literature - 3 hrs.
Selected generic, thematic, or critical topic or specific writer. Topic listein Schedule of Classes. May be repeated for credit. Prerequisite or corec uisite: 620:201. (Variable)
620:291. Seminar in the Teaching of English - 3 hrs.
Prerequisite or corequisite: 620:201. (Variable)
620:297. Practicum.
Graduate-level student teaching. See page 184. Prerequisite: consent of instructor. Prerequisite or corequisite: 620:201. (Variable)
620:299. Research.
Prerequisite or corequisite: 620:201. (Offered Fall, Spring, and Summer

## 630 TESOL/Applied Linguistics

630:125 (g). Introduction to Linguistics - 3 hrs .
Examination of phonology, syntax, and semantics in a variety of natur and artificial languages; includes study of language development and regional and social variation. No credit if prior credit in 630:130. Prered uisite: junior standing or consent of TESOL major advisor. (Offered Fa and Spring)
$630: 130(\mathrm{~g})$. The Structure of English - 3 hrs.
Linguistic analysis of phonology, syntax, and semantics in moder American English; study of language development and regional and social variation. No credit if prior credit in 630:125. Prerequisite: junic standing or consent of TESOL major advisor. (Offered Fall and Spring) 630:135. Language in Culture - 3 hrs.
Interrelationship of language, culture, and non-verbal communicatid and the role each of these plays in shaping thought and attitudes. Prerec uisite or corequisite: 630:125 or 630:130. (Variable)

## 630:143(g). History of the English Language - 3 hrs .

Developmental survey of the English language from its beginnings to the present as a product of linguistic change and variation, political history, and social attitude. Prerequisites: 630:125 or 630:130; junior standing. (Variable)

## 630:154(g). Phonology - 3 hrs.

Sound systems of human languages, including articulatory and acoustic phonetics, structural phonetics, distinctive features, and generative phonology. Prerequisite: junior standing. Prerequisite or corequisite: 630:125 or 630:130. (Variable)

## 630:156(g). Syntax - 3 hrs.

Theories of grammar from a generative-transformational point of view with special emphasis on English syntax. Prerequisite: junior standing. Prerequisite or corequisite: $630: 125$ or $630: 130$. (Variable)
$630: 160(\mathrm{~g})$. Sociolinguistics - 3 hrs .
Study of language and society, including language variation associated with such factors as geography, socioeconomic class, and gender. Prerequisites: 630:125 or 630:130; junior standing. (Variable)
630:163(g). Cultural Aspects of Language and Language Teaching -
3 hrs.
Investigation of relationship between language and culture and the interactions among language, social institutions, cultural beliefs, and individual behavior. Applications for teaching English to non-native speakers. Prerequisites: 630:125 or 630:130; junior standing. (Variable)

## 630:165 (g). Language Development - 3 hrs.

Study of contemporary theory and research in first and second language acquisition with applications for teaching English to non-native speakers. Prerequisite: junior standing. (Offered Fall)
630:190(g). Applied English Linguistics for Teachers - 3 hrs.
Linguistic insights applied to study of language use-writing, reading, spelling, and vocabulary; for prospective and current teachers of English. Prerequisites: 630:125 or 630:130; junior standing. (Variable)

## 630:192(g). Problems in English Grammar - 3 hrs.

Investigation of the grammatical system of English; emphasis on tools and processes used to identify and teach grammatical patterns. Prerequisite: junior standing. Prerequisite or corequisite: 630:125 or 630:130. (Variable)

## 630:193(g). TESOL I: Methods and Approaches - 3 hrs.

Historical background of Teaching English to Speakers of Other Languages and overview of teaching approaches; teaching the four skills of listening, speaking, reading, and writing. Prerequisite: junior standing. Prerequisite or corequisite: 630:125 or 630:130. (Offered Fall and Spring)
630:194(g). TESOL II: Pedagogical Strategies - 3 hrs.
Lesson planning, materials design and adaptation, materials evaluation, classroom assessment, and curriculum planning for Teaching English to Speakers of Other Languages. Prerequisite: junior standing. Prerequisite or corequisite: 630:125 or 630:130. (Offered Fall and Spring)

## 630:195(g). Modern English Grammar and Usage - 3 hrs.

Intensive examination of English grammar, mechanics, and usage; rules of punctuation, spelling, syntax, and usage related to oral and written forms of English; discussion of the teaching of grammar. Prerequisite: junior standing. (Variable)

## 630:196(g). Bilingual Education in the Public Schools - 3 hra.

Historical development of bilingual education and current approaches to meeting the needs of limited English proficient students; special emphasis on the principles of content-based second language instruction and the role of language attitudes in policy making. Prerequisite: junior standing. Prerequisite or corequisite: 630:125 or 630:130. (Offered Spring)
630:198. Independent Study.
(Offered Fall and Spring)

## 630:201. Introduction to Graduate Study in TESOL/Applied Linguistics

 -3 hrs .Introduction to sources, tools, and techniques in graduate-level study and research in TESOL and language sciences. (Offered Fall)

## 630:240. Computer Assisted Language Learning (CALL) - 3 hrs.

Exploration of purposes, applications, and roles of computers in language learning and language testing; application to skills of reading, writing, listening, and speaking. Use of internet resources and tools. (Offered Fall)
630:254. Seminar in Phonology - 3 hrs.
(Variable)
630:256. Seminar in Syntax - 3 hrs.
(Variable)
630:289. Seminar in Language - 3 hrs .
Topic listed in Schedule of Classes. May be repeated. (Offered Fall and Spring)
630:292. Second Language Acquisition - 3 hrs.
Historical background and methodology of second language acquisition research; current theories of acquisition and learning; role of individual and societal variables in language learning. (Offered Fall)
630:295. Language Testing - 3 hrs.
Examination of basic approaches and techniques for constructing and interpreting language tests. (Offered Spring)

## 630:297. Practicum.

Graduate-level student teaching of English as a second language. See page 184. Prerequisite: consent of instructor. (Offered Fall and Spring)

630:299. Research.
(Offered Fall and Spring)

## 640 Religion

640:024. Religions of the World - 3 hrs.
Living religions of humankind with emphasis on their relevance to interpretations of existence, the problem of meaning and values, and human destiny. (Offered Fall, Spring, and Summer)

## 640:030. What is Religion? - 3 hrs.

Basic forms and views of religious phenomena, such as encounter, tradition, ritual, community, divine law, meditation, mysticism, response to life-crisis, and personal growth and fulfillment. (Variable)
640:040. Religion, Ethics, and Film - 3 hrs.
Introduction to study of religion through critical examination of a variety of contemporary films. Draws on student visual literacy as approach to the study of religion. (Variable)

## 640:110. Angeis Across Cultures - 3 hrs.

Study of the persistent belief in angels and angel-like, superhuman beings in different religions and cultures, and examination of dynamics of popular religion. (Offered odd Springs)

## 640:113(g). Philosophy of Religion - 3 hrs.

Examination of philosophical discussions on the nature and function of religion and religious language; special attention to how philosophical frameworks and methods shape understanding of religion and talk about God and human fulfillment. Prerequisite: junior standing. (Same as $650: 113 \mathrm{~g}$ ) (Offered odd Springs)
640:115(g). Religion and Its Critics - 3 hrs.
Issues raised by encounter between traditional Christian faith and modern concepts and methods of philosophy, science, history, sociology, and cultural criticism. Examination of positions of both 19th- and 20th-century theologians. Prerequisite: junior standing. (Offered even Springs)
640:117(g). Religion in America - 3 hrs.
Investigation of religious movements and beliefs from colonial times to present. 640:024 or 650:021 recommended to precede this course. Prerequisite: junior standing. (Same as $960: 145 \mathrm{~g}$ ) (Offered odd Springs)

## 640:126. Meditation and Mystical Experionce - 3 hrs.

Examination of various techniques of meditation and their results, draw-
ing from Yoga, Zen, Buddhist, Christian, and secular sources including first-hand accounts of meditational practice and philosophic and psychological studies in the area of mysticism. (Offered even Springs)
640:130. Great Living Religions: Hinduism and Buddhism - 3 hrs.
Hinduism, Jainism, Buddhism, Islam. (Offered even Falls)
640:132. Great Living Religions: Confucianism, Taoism, and Zen - 3 hrs. Taoism, Confucianism, Buddhism, Shintoism. (Offered odd Falls) 640:134. Great Living Religions: Judaism and Islam - 3 hrs.
Study of the doctrines and practices of Judaism and Islam in their cultural context with attention to historical development and current situation. (Offered odd Springs)
640:136. Great Living Religions: Christianity - 3 hrs.
Introductory survey of development, beliefs, practices, and varieties of Christianity. (Offered even Springs)
640:138. Malcolm, Martin, and Justice - 3 hrs.
How might religious leaders insert themselves in the struggle for justice and human rights? Malcolm $\mathbf{X}$ and Martin Luther King, Jr. represent the intricate involvement of black religious leaders in the African American struggle for social, political, and economic justice. (Same as 680:138) (Variable)
640:141. Old Testament and Other Hebrew Scriptures - 3 hrs.
Introduction to history and ideas of Old Testament and other Hebrew scriptures. (Offered even Falls)
640:142. New Testament and Early Christian Writings - 3 hrs.
Introduction to history and ideas of New Testament and early Christian writings. (Offered odd Falls)

## 640:152 (g). Existentialism - 3 hrs.

The unique contribution of existentialism to philosophy is its sustained focus on everyday life: the contradictions of human existence, the human body, the existence of others, and human freedom. Presupposes no previous knowledge of philosophy. Prerequisite: junior standing. (Same as 650:152g) (Offered even Falls)
640:154(g). Myth and Symbol - 3 hrs.
Investigation of meaning and significance of religious myths and symbols, and theories used to study them. Prerequisite: junior standing. (Variable)

## 640:161. Religion, Magic and Witchcraft - 3 hrs.

Anthropological understanding of behavior dealing with the supernatural; supernatural beliefs, practices, and movements throughout the world. Prerequisite: 990:011 or consent of instructor. (Same as 990:161) (Offered Spring)

## 640:162(g). Women and Christianity - 3 hrs.

Examination of history and function of gender in symbolization of Christian tradition; exploration of institutionalization of sex roles in Christianity; discussion of interaction between the Christian religion and cultural patterns that define the social role, status, and image of women. Interested students are encouraged to contact the instructor. Prerequisite: junior standing. (Variable)

## 640:165(g). Religion and Society - 3 hrs.

Religious institutions and their social context; changes and development in religion; religious organization and behavior; and social function of religion. Prerequisite: junior standing. (Offered odd Springs)
640:168(g). Religion and Sexuality - 3 hrs.
Examination of ways in which religions shape and reflect ideas about the body and sexuality. Prerequisite: junior standing. (Variable)

## 640:171. Religion and Ethics - 3 hrs.

Examination of key issues having to do with religion and ethics, including the moral function of religion, religious pluralism, war and peace, freedom and responsibility, religion and politics, religion and gender, and social justice. (Offered Fall)
640:173. Bio-Medical Ethics - 3 hrs.
Application of principles and analytic methods of ethical theory to con-
temporary issues in medical practice and research. Topics include funder mental concepts of health and disease, life and death; rights and obligit tions of medical practitioners and their patients; informed consent and confidentiality; abortion and euthanasia; reproductive and transplante. tion technologies; and health policy and the provision and rationing of health care. (Same as 650:173) (Offered Fall and Spring)
$640: 174(\mathrm{~g})$. Ethics in Business - 3 hrs .
Application of ethical principles and analytic methods to contemporary issues in business. Topics include moral responsibility of corporationi and their regulation; economic policy, business practices, and socil justice; rights and obligations of employers and employees; meaningfig work, motivation, and the worker; affirmative action and reverse dis\% crimination; and environment and natural limits of capitalism. Prerequef site: junior standing. (Same as 150:174g and 650:174g) (Offered Fall and Spring)
640:175(g). Environmental Ethics - 3 hrs.
Introduction to and application of ethical theory to environmental issues, including responsibility for plants and animals, pollution, natur resources, and population growth. Prerequisite: junior standing. (Samaus 650:175g) (Offered odd Falls)
640:186(g). Studies in Religion - 3 hrs.
Topics listed in Schedule of Classes. Prerequisite: junior standing. (Offer) Fall and Spring)
640:189(g). Individual Readings in Religion - $1-3$ hrs.
Individually-arranged readings and reports from: (1) biblical studic (2) history of religions, or (3) contemporary religious thought. Can be repeated for maximum of 6 hours. Prerequisites: junior standing; conseri of department head. (Offered Fall and Spring)
640:194(g). Perspectives on Death and Dying - 3 hrs.
Multidisciplinary study of death, dying, and bereavement across culturel, religious and ethnic groups, and historical periods, with attention to ritual and memoir, ethical dilemmas at the end of life, and psychology of mourning. Prerequisite: junior standing. (Same as $650: 194 \mathrm{~g}$ ) (Offerd Fall and Spring)

## 640:197. Ethics Practicum - 3 hrs.

Combines service-learning with study of theoretical and applied ethic Students work 4-6 hours per week in a community agency and meet witl instructor. Prerequisites: one completed or concurrent ethics course; cond sent of instructor. (Same as 650:197) (Offered Fall and Spring)
640:250. Critical Perspectives on Gender - 3 hrs.
Consideration of two traditions that have influenced feminist theories in the last two decades - poststructuralism and psychoanalysis. Readings in primary texts (e.g., Foucault, Derrida, Freud, and Lacan) and explorttions of feminist elaborations and critiques of these texts revealing the tenacity, centrality, and power in human lives of a sense of genderel existence. (Same as 650:250) (Offered even Springs)

## 650 Philosophy

650:021. Philosophy: Basic Questions - 3 hrs.
Introductory exploration of questions concerning nature of self, realit meaning, knowledge, truth, faith, value, and obligation. (Offered Fall an¢) Spring)
650:045. Elementary Logic - 3 hrs.
Methods, principles, and rules of reasoning with emphasis on their prac tical uses in effective thinking, scientific inquiry, and verbal communic tion. (Offered Fall and Spring)
650:050. Reasoning About Moral Problems - 3 hrs.
Introduction to critical thinking and writing about moral and soci problems. Topics may include hunger, economic justice, anti-Semitisul sexism, animal rights, affirmative action, abortion, and homosexuality (Variable)

## 650:100. History of Philosophy: Ancient - 3 hrs.

History of philosophy from the Pre-Socratics to late antiquity, with emphasis on Plato and Aristotle. Prerequisites: one philosophy course and sophomore standing, or consent of instructor. (Offered odd Falls)
650:101. History of Philosophy: Medieval - 3 hrs.
History of philosophy from late Roman times through Middle Ages, with emphasis on Augustine and Thomas Aquinas. Prerequisite: one philosophy course and sophomore standing, or consent of instructor. (Offered even Springs)

## 650:103. History of Philosophy: Renaissance through Enlightenment -

 3 hrs.History of philosophy from Renaissance through Hume, with emphasis on continental rationalism and British empiricism. Prerequisite: one philosophy course and sophomore standing, or consent of instructor. (Offered even Falls)

## 650:104. History of Philosophy: Modern - 3 hrs.

History of philosophy from Kant to present; emphasis on idealism, romanticism, materialism, positivism, phenomenology, existentialism. Prerequisite: one philosophy course and sophomore standing, or consent of instructor. (Offered odd Springs)
650:105(g). Marxism - 3 hrs.
Basic doctrines of Karl Marx and Frederick Engels and others within Marxist tradition. Dialectical and historical materialism; Marxist conception of nature and human society; historical and contemporary influence of Marxism on economic and political developments, religion, ethics, science and technology, and literature and the arts. Prerequisite: junior standing. (Offered odd Falls)
650:113(g). Philosophy of Religion - 3 hrs.
Examination of philosophical discussions on the nature and function of religion and religious language; special attention to how philosophical frameworks and methods shape understanding of religion and talk about God and human fulfillment. Prerequisite: junior standing. (Same as 640:113g) (Offered odd Springs)
650:119. Philosophy of Science - 3 hrs.
Philosophical problems of the sciences; nature of laws and theories, causation, explanation and scientific method, and relation between natural and social sciences. (Offered even Falls)

## 650:142. Ethics - 3 hrs.

Study of the major school of ethical theory through reading major thinkers and their contemporary commentators. Examination of selected theoretical and practical problems in contemporary ethics. Prerequisites: one philosophy course and sophomore standing, or consent of instructor. (Offered Spring)

## 650:143. Aesthetics - 3 hrs.

Examines the question of the nature of art through a discussion of the major philosophical theories: imitation theory, expression theory, and formalism, as well as a critique of these theories. Field trips included. Prerequisites: one philosophy course and sophomore standing, or consent of instructor. (Offered even Falls)
650:150(g). Knowledge and Reality - 3 hrs .
Study of variety of knowledge-claims about the world and of the structures of reality implied. Prerequisite: junior standing. (Offered Fall)
650:152(g). Existentialism - 3 hrs.
The unique contribution of existentialism to philosophy is its sustained focus on everyday life: the contradictions of human existence, the human body, the existence of others, and human freedom. Presupposes no previous knowledge of philosophy. Prerequisite: junior standing. (Same as 640:152g) (Offered even Falls)
650:153(g). The Human Person - 3 hrs.
Philosophical study of human nature and mind informed by biology and modern sciences of mind. Topics include relation of mind to body,
consciousness, free will, the implications of Darwinism, and the nature of emotions. Prerequisite: junior standing. (Variable)
650:172. Society, Politics, and the Person - 3 hrs.
Critical investigation of contexts of engagement and responsibility of persons as members of social institutions and as participants in public discourse on policy and law. (Variable)
650:173. Bio-Medical Ethics - 3 hrs.
Application of principles and analytic methods of ethical theory to contemporary issues in medical practice and research. Topics include fundamental concepts of health and disease, life and death; rights and obligations of medical practitioners and their patients; informed consent and confidentiality; abortion and euthanasia; reproductive and transplantation technologies; and health policy and the provision and rationing of health care. (Same as 640:173) (Offered Fall and Spring)

## $650: 174(\mathrm{~g})$. Ethics in Business - 3 hrs.

Application of ethical principles and analytic methods to contemporary issues in business. Topics include moral responsibility of corporations and their regulation; economic policy, business practices, and social justice; rights and obligations of employers and employees; meaningful work, motivation, and the worker; affirmative action and reverse discrimination; environment and natural limits of capitalism. Prerequisite: junior standing. (Same as 150:174g and 640:174g) (Offered Fall and Spring)
650:175(g). Environmental Ethics - 3 hrs.
Introduction to and application of ethical theory to environmental issues, including responsibility for plants and animals, pollution, natural resources, and population growth. Prerequisite: junior standing. (Same as 640:175g) (Offered odd Falls)
650:186(g). Studies in Philosophy - 3 hrs.
Study of philosophical thinker or problem listed in Schedule of Classes. Prerequisite: junior standing. (Offered Fall and Spring)
650:189(g). Individual Readings in Philosophy - 1-3 hrs.
Individually arranged readings and reports drawn from history of philosophy or contemporary philosophical problems. May be repeated for maximum of 6 hours. Prerequisites: junior standing; consent of department head. (Offered Fall and Spring)

## 650:194(g). Perspectives on Death and Dying - 3 hrs.

Multidisciplinary study of death, dying, and bereavement across cultures, religious and ethnic groups, and historical periods, with attention to ritual and memoir, ethical dilemmas at the end of life, and psychology of mourning. Prerequisite: junior standing. (Same as $640: 194 \mathrm{~g}$ ) (Offered Fall and Spring)

## 650:197. Ethics Practicum - 3 hrs.

Combines service-learning, with study of theoretical and applied ethics. Students work 4-6 hours per week in a community agency and meet with instructor. Prerequisites: one completed or concurrent ethics course; consent of instructor. (Same as 640:197) (Offered Fall and Spring)
650:245. Ethics in Public Policy - 2 hrs.
Attention to major ethical issues facing practitioners of public policy analysis through: a study of ethical principles and procedures of analysis; application of these methods to crucial questions of professional conduct and responsibility; and their application to selected policy problems of timely interest. Prerequisite: enrollment in the Master of Public Policy Degree Program or consent of instructor. (Offered Fall)
650:250. Critical Perspectives on Gender - 3 hrs.
Consideration of two traditions that have influenced feminist theories in the last two decades - poststructuralism and psychoanalysis. Readings in primary texts (e.g., Foucault, Derrida, Freud, and Lacan) and explorations of feminist elaborations and critiques of these texts revealing the tenacity, centrality, and power in human lives of a sense of gendered existence. (Same as 640:250) (Offered even Springs)

## 680 Humanities

There is no humanities department as such. The courses below are interdisciplinary and are taught jointly by staff from several departments.
680:010. Leadership: Skills and Styles - 3 hrs.
Basic principles and skills of personal leadership. Focus on clarifying values, motivating individuals, and organizing groups. Practical applications and use of case studies. (Variable)

## 680:021. Humanities I: The Ancient, Classical, and Medieval Worlds -

 3 hrs.Literature, philosophy, religion, and the fine arts, integrated with the history of Western Civilization to 1300. (Offered Fall, Spring, and Summer)
680:022. Humanities II: The Renaissance, Reformation, and
Enlightenment - $\mathbf{3}$ hrs.
Literature, philosophy, religion, and the fine arts, integrated with the history of Western Civilization from 1300 to the French Revolution of 1789.
(Offered Fall, Spring, and Summer)
680:023. Humanities III: The Age of Revolution to the Present - 3 hrs.
Literature, philosophy, religion, and the fine arts integrated with the history of Western Civilization since the French Revolution of 1789. (Offered Fall, Spring, and Summer)

## 680:040. Women's Studies: Introduction - 3 hrs.

Interdisciplinary approach to study of Feminism and aspects of genderrole stereotyping and socialization in institutions, programs, and curricula which prevent fair treatment for all. (Offered Fall and Spring)
680:102(g). Nonverbal Communication - 3 hrs.
Patterns of human expression apart from the spoken or written word. Prerequisite: junior standing. (Same as 48C:121g) (Offered Fall and Spring)
680:110(g). Leadership: Concepts and Practice - 3 hrs.
Analysis of relationship between leadership theory and practice. Focus on development of critical and evaluative skills. Historical and contemporary perspectives on leaders and issues. Prerequisites: 680:010; junior standing.
680:121. Russia/Soviet Union - 3 hrs.
Interdisciplinary examination of the culture, history, geography, economy, political system, and society of Russia and the Soviet Union. (Offered Fall and Spring)

## 680:122. Japan - 3 hrs.

Introductory study of Japan: geographical setting, historical background, cultural heritage, social and political systems, and economic development and importance. (Offered Fall and Spring)

## 680:123. Latin America - 3 hrs.

Historical, political, social, and cultural elements that form the civilization of Latin America. No credit if student has credit in 780:120. May not be taken for credit by History majors or minors. (Offered Fall and Spring)

## 680:124. China - 3 hrs.

Historical treatment of significant elements of Chinese culture and major aspects of modern China's transformations since the mid-19th century. (Offered Fall and Spring)
680:125. India - 3 hrs.
Historical treatment of significant elements of Indian culture and major aspects of modern India's transformation under British rule and since independence. (Offered Fall and Spring)
680:127. Middle East - 3 hrs .
Interdisciplinary examination of significant elements of Middle East culture and society: current patterns, tensions, and contributions. (Variable)

## 680:128. Africa - 3 hrs .

Interdisciplinary examination of contemporary African society and culture: historical heritage, problems, prospects, and importance. (Offered Fall and Spring)

680:130. Culture and Philosophy of African American Life - 3 hrs.
Interdisciplinary exploration of culture and philosophy of African Amer_ ican life; emphasis on historical and current aspects of life which enhaned or deter progress of African Americans educationally, economically, and politically. (Variable)
680:131. Practicum in African American Culture - 2 hrs.
Opportunity to work on self-optioned or assigned project; may includ work in public school system, volunteer bureaus, and/or community social agencies. May be repeated for maximum of 4 hours. Prerequisite or corequisite: 680:130. (Variable)
680:132. Native North America - 3 hrs.
Ethnographic survey of sociocultural systems developed by Nativ1 Americans north of Mexico. Emphasis on relationships that exist amone ecological factors, subsistence techniques, social organizations, and belie systems; and the impact interactions with European and U.S. societie) had on Indian lifestyles. (Same as 990:132) (Variable)
680:137. Native Central and South America - 3 hrs.
Ethnographic survey of sociocultural systems developed by foraging and horticultural peoples of South America; emphasis on relationships that exist among ecological factors, subsistence techniques, social organiza tions, and beliefs systems from holistic, comparative, and cross-culturd perspectives. (Same as 990:137) (Variable)
680:138. Malcolm, Martin, and Justice B 3 hrs.
How might religious leaders insert themselves in the struggle for justic and human rights? Malcolm X and Martin Luther King, Jr. represent the intricate involvement of black religious leaders in the African Americatl struggle for social, political, and economic justice. (Same as 640:13c (Variable)
680:151(g). Images of Blacks in the White Mind B 3 hrs.
Exploration of the purposefully constructed image of blacks which reina forces inequality, the historical development of white supremacist ideol ogy, and the disempowerment of blacks in the United States. Prerequisit junior standing. (Variable)
680:156(g). Topics in Gay/Lesbian/Bisexual Studies - 3 hrs.
Survey of history of homosexuality and bisexuality from ancient Greeld to present; contributions to art, music, drama, and literature by person, who are or are considered to be homosexual/bisexual; and current sociod logical, political, and religious theories of homosexuality/bisexuality. May, be repeated on different topic. Prerequisite: junior standing. (Variable) 680:160(g). Black Women in America: Challenge, Spirit, Survival -

3 hrs.
Investigation of major themes in lives of black women in America, utiliz1 ing scholarship from sociology, literature, cultural studies, and womanis। theology. Challenges to fruitful existence and role of striving for self representation direct the two major units of course. Prerequisite: junio, standing. (Variable)

## 680:168. Mythology - 3 hrs.

Study of primitive and sophisticated examples of myth and mythopoetil thinking from variety of cultures; emphasis on how myths function in art, society, and the individual. (Variable)

## 680:169. Leadership Internship - 1-3 hrs.

Field placement designed to further develop leadership abilities. Site placement determined in consultation with the Director of Leadershif Studies. Prerequisites: 680:010; 680:110; consent of instructor and Direc tor of Leadership Studies. (Variable)

## 680:188. Seminar on Leadership Development: The Future - $\mathbf{1 - 2} \mathbf{~ h r s . ~}$

Synthesis of theory and practice of leadership; examination of case stud4 ies and research on leadership issues and ethics; preparation of career plans that include service component. Prerequisites: 680:010; 680:110; junior standing or consent of instructor. (Variable)
680:189(g). Seminar in Environmental Problems - 3 hrs.
Experience in environmental problem solving of both a theoretical and
practical nature. Prerequisites: junior standing; consent of instructor. (Variable)
680:192. Junior-Senior Seminar - 3 hrs.
Seminar in humanities offered to junior and senior majors in Humanities as listed in Schedule of Classes. Open to upperclass students of any major. May be repeated in different fields. (Variable)
680:198. Independent Study.
(See pages 60-61, 184.)
680:289. Graduate Seminar in Women's Studies: Global Feminisms 3 hrs.
Analysis of identities and oppressions from national and international feminist perspectives. (Offered Fall)
680:290. Graduate Seminar in Women's Studies: Library Research Methods - $1 \mathbf{h r}$.
Library research strategies and methods. (Offered Spring)

## 690 Humanities, Interdepartmental

690:030. Arts in the Americas - 3 hrs.
introduction to cross-cultural understanding of art, dance, film, music, and theatre in the Americas. Emphasis on forms, origins, directions, isolations, and interactions. Inter-departmentally team taught. (Variable)

## 700 Languages

700:099. Preparation for Study Abroad - 2 hrs.
For students planning to study and travel abroad. Practical, social, geographic, and cultural aspects; some emphasis on contrasting American and foreign cultures. No credit on major or minor in foreign language. (Offered Fall and Spring)
700:181(g). Translation Theory - 2-3 hrs.
Taught in English. Exploration of, with the help of extant literature, various aspects of translation, such as skills versus creativity, the relationship between original and translation, modes of translation, and a diachronic overview of the philosophy of translation. Prerequisites: reading knowledge of one foreign language; junior standing; consent of instructor. (Variable)
$700: 150(\mathrm{~g})$. The Teaching of Foreign Languages - 2-4 hrs.
Foreign language theories, terms, concepts, and demonstration of their practical application. Note: In order to apply this course toward a teaching degree, students must be admitted to the Teacher Education Program before taking 700:190. Prerequisites: 7x0:101; junior standing. Corequisite: 7x0:191. (Offered Fall and Spring)
700:192(g). The Teaching of Foreign Languages in the Elementary
Schools - 2-4 hrs.
Various approaches, teaching resources, instructional framework, and classroom activities suitable for elementary education. Prerequisites: 7x0:101; junior standing. (Variable)
700:193(g). Technology in Foreign Language Education - 2-3 hrs.
Based on current research and methodological approaches, enables critical selection, integration, and application of modern technology in foreign language instruction. Prerequisite: junior standing. Prerequisite or corequisite: 700:190; 7x0:191; or consent of instructor. (Offered Fall and Spring)
700:198. Independent Study.
(Variable)
700:230. Advanced Literary Translation - 3 hrs.
Preparation of literary translation in English of representative cross-section of literary genres. Extensive discussion of practical and theoretical problems involved. Emphasis on creative aspects. Prerequisite: B.A. in one foreign language. (Variable)
700:290. Theory and Practice in Foreign Language Teaching - 1-3 hrs.
Synthesis of past and current theories of language acquisition with
language teaching practice. May be repeated. Prerequisite: consent of instructor. (Variable)
700:295. Research Methods in Culture and Literature - 2-3 hrs.
Prepares students in various aspects of cultural and literary criticism, use of critical approaches and latest library resources. Graduate students must take this course during first three resident semesters. (Formerly 700:195g) (Offered Fall)

## 710 Chinese

710:001. Elementary Chinese I-5 hrs.
For beginners. (Variable)
710:002. Elementary Chinese II - 5 hrs.
Continuation of 710:001. Prerequisite: 710:001 or consent of instructor. (Variable)
710:011. Intermediate Chinese I-5 hrs.
Continuation of 710:002. Progressive development of writing, reading, and speaking skills through sequence of exercises relating to daily practical living. Grammatical refinement using numerous illustrations of more difficult new words in dialogues on everyday topics. Prerequisite: 710:002 or consent of instructor. (Variable)
710:102. Advanced Chinese II - 3 hrs .
Prerequisite: consent of instructor. (Variable)

## 720 French

720:001. Introduction to French Language and Culture I - $\mathbf{3 - 4}$ hrs.
Development of listening comprehension, speaking, reading and writing, and cultural literacy. Corequisite: 720:003. (Offered Fall and Spring)
720:002. Introduction to French Language and Culture II - 3-4 hrs.
Continuation of 720:001. Prerequisites: 720:001; 720:003; or equivalents. Corequisite: 720:004. (Offered Fall and Spting)
720:003. French Communication Practice I-1-2 hrs.
Practice (both live and computer-mediated) to reinforce and broaden the development of language and culture. Corequisite: 720:001. (Formerly part of 720:001) (Offered Fall and Spring)
720:004. French Communication Practice 11 - 1-2 hrs.
Continuation of 720:003. Prerequisites: 720:001; 720:003; or equivalents. Corequisite: 720:002. (Formerly part of 720:002) (Offered Fall and Spring) 720:011. Intermediate French Language and Culture - $\mathbf{3 - 4}$ hrs.
Thorough review of patterns of French; development of vocabulary and emphasis on listening comprehension, speaking, reading and writing, and cultural literacy. Prerequisites: 720:002; 720:004; or equivalents. Corequisite: 720:012. (Offered Fall and Spring)
720:012. Intermediate French Communication Practice - 1-2 hrs.
Practice (both live and computer-mediated) to reinforce and broaden the development of language and culture. Prerequisites: 720:002; 720:004; or equivalents. Corequisite: 720:011. (Formerly part of 720:011) (Offered Fall and Spring)
720:031. Introduction to Francophone Literature in Translation - 3 hrs.
Understanding and appreciating basic forms of French-language literatures in English translation through close reading of literary texts. May be counted for credit in French minor. (Variable)
720:051. Composition - 2-3 hrs.
Continuation of 720:011, leading to free composition. Prerequisite: 720: 011 or equivalent. Corequisite: 720:061 or other intermediate course with consent of department head. (Offered Fall and Spring)
720:061. Conversation - 2-3 hrs.
Continuation of 720:011, with wider range of subjects, vocabulary, and structures. Prerequisite: 720:011 or equivalent. Corequisite: 720:051 or other intermediate course with consent of department head. (Offered Fall and Spring)

## 720:100. Teaching French in the Elementary Schools - 1 hr .

Techniques and practice in teaching French; includes weekly training experience in local schools plus class sessions. May be repeated twice. Prerequisite: consent of instructor. (Variable)
720:101(g). Advanced Composition - 3 hrs.
Analysis of major morphological and syntactical structures of the French language, with contrasting grammatical and linguistic approaches to problems of correct usage. Emphasis on successful application of principles. May be repeated once with consent of instructor. Prerequisites: 720:051; junior standing. (Offered Fall)

## 720:102. French to English Translation - 3 hrs.

Introduction to translation techniques involved in translation of French into English. Topics selected from varied magazines dealing with business, culture, and general information. Prerequisite: 720:051 or consent of instructor. (Variable)

## 720:103(g). Advanced Conversation - 3 hrs.

Development and improvement of oral fluency through free and guided conversation. May be repeated once with consent of instructor. Prerequisites: 720:051; 720:061; or consent of instructor; junior standing. (Variable)

## 720:104. Introduction to French Literature - 3 hrs.

Selected major works of representative French authors. Application of language skills to literary analysis and introduction to critical theories. Prerequisite: 720:101 or equivalent. (Offered Spring)

## 720:105(g). Stylistics - 3 hrs.

Introduction to stylistic analysis. Development of style in composition through study of excerpts from contemporary French works and literary translation into French. Prerequisite: junior standing. Prerequisite or corequisite: 720:101 or equivalent. (Variable)

## 720:107(g). Listening and Comprehension - 3 hrs.

Development and improvement of ease with which one understands all types of standard speech including taped material, readings, radio and television broadcasts, and movies. Offered only on summer study tour. Prerequisite: junior standing. (Variable Summer)
720:108(g). Introduction to Interpreting - 3 hrs .
Introduction to consecutive and simultaneous translation. May be repeated once. Prerequisites: 720:103 or comparable fluency in French; junior standing. (Variable)

## 720:111. Business French - 2-4 hrs.

Introduction to current business concepts and practices in French-speaking countries. Reading and interpreting business information, and reading and writing basic business correspondence. Prerequisite: 720:011 or equivalent. (Offered odd Falls)
720:114(g). Short Stories - 3 hrs .
Short stories from Vigny, Merimee, Daudet, Maupassant, Ayme, and others. Prerequisites: 720:101; 720:104; junior standing. (Variable)
720:121(g). Speciel Topics in Language and Culture - 3 hrs.
Special topics and aspects of the discipline. May be repeated on different topic. Prerequisites: 720:101; 720:104; or equivalents; junior standing. (Variable)
720:122(g). Special Topics in Literature - 3 hrs.
Special topics and aspects of the discipline. May be repeated on different topic. Prerequisites: 720:101; 720:104; or equivalents; junior standing. (Variable)
720:124(g). Contemporary France - 3 hrs .
Survey of recent developments and a description of the country, its people, customs and way of life, institutions, economy, and art. May be repeated once in summer institutes abroad. Prerequisite: junior standing. Prerequisite or corequisite: 720:101 or equivalent. (Varriable)

## 720:125 (g). French Culture and Civilization - 3 hrs.

Historical, cultural and sociological background for understanding contemporary France. May be repeated for 2 hours in summer institutes
abroad. Prerequisites: 720:101 or equivalent; junior standing. (Variablef 720:126(g). French Summer Symposium: (Topic) - 2-6 hrs.
Intensive summer course designed to complement courses offered durind the fall and spring semesters. Topic listed in Schedule of Classes. May be repeated on different topic. Prerequisites: 720:101 or equivalent; junio, standing. (Offered Summer)

## 720:128(g). Literature of Ideas - 3 hrs.

Montaigne, Pascal, La Rochefoucauld, Saint Simon, La Bruyere, Mon ${ }_{n}$ tesquieu, Voltaire, Chateaubriand, Rousseau, de Tocqueville, and their modern successors. Prerequisites: 720:101; 720:104; junior standin( (Variable)

## 720:144(g). Novels of the 19th and 20th Centuries - 3 hrs.

Novels from Balzac, Stendhal, Flaubert, Proust, Robbe-Grillet, and othent Prerequisites: 720:101; 720:104; junior standing. (Variable)

## 720:160 (g). Advanced Oral Practice - 2-4 hrs.

Development of oral fluency and greater accuracy through structured oral exercises; free conversation dealing with civilization and topics of current interest. Structural, morphological, and phonetic exercises designed to meet the needs of individual participants. Prerequisite: junio standing. Prerequisite or corequisite: 720:101 or equivalent. (Variable)
720:161 (g). Problems in French Pronunciation - 2 hrs.
Correction of and practice in producing French sounds, intonatiot rhythm, and stress to minimize foreign accent. Prerequisites: 720:05 720:061; or equivalents; junior standing. (Variable)

## 720:181(g). Advanced Business French - 3 hrs.

Study of current business concepts and practices in French-speakin: countries through systematic analysis of business-related topics based on authentic reading materials and business communications. Prerer uisites: 720:111 or consent of instructor; junior standing. (Offered even Springs)

## 720:185(g). Introduction to Translation - 3 hrs .

Introduction to journalistic and technical translation using varied textur materials (public media, scholarly, and professional texts), from Englisl) to French and French to English. May be repeated once. Prerequisite 720:101 or equivalent; junior standing. (Variable)
720:191. Bilingual Practicum - 1-3 hrs.
Participants meet on a regular basis with instructor to acquire first-hand knowledge of foreign language methodologies through activities and class observations. Required for students enrolled in the foreign-languat teacher education program. Prerequisite: 720:101. Corequisite: 700:190 (Offered Spring)

## 720:201. Advanced Composition and Stylistics - 3 hrs.

Study of stylistic devices; examination of principal morphological, syes tactical, and semantic problems. (Variable)
720:203. Structure of French - 3 hrs .
Phonology, morphology, and syntax of current French, stressing areas of French structure which cause problems for native speakers of English (Variable)
720:207. Contemporary French Speech - 2 hrs.
Understanding and identification of major levels of spoken French, including elegant, standard, and familiar speech styles; structural, lexical and phonological study of current French speech, stressing areas of socio linguistic importance. (Variable)

## 720:225. Problems in Translation - 3 hrs.

Techniques of translation with journalistic and technical emphaser (Variable)
720:226. French Graduate Summer Symposium: (Topic) - 2-6 hrs.
Intensive summer course designed to complement courses offered durin the fall and spring semesters. Topic listed in Schedule of Classes. May be repeated on different topic. Prerequisite: 720:101 or equivalent. (Offerel Summer)

## 720:270. French Literature in Review 1 - 3 hrs.

Chronological review of major periods; works and writers of French literature from the Middle Ages through the Age of Enlightenment. Focus on development of each literary genre. Primarily for students planning to take M.A. comprehensives in French. Prerequisite: graduate standing or consent of instructor. (Variable)

## 720:271. French Literature in Review II - 3 hrs.

Chronological review of major periods; works and writers of French literature from 19th century to present. Focus on development of each literary genre. Prerequisite: graduate standing or consent of instructor. (Variable)
720:289. Seminar - 3 hrs.
Various topics such as Medieval Literature, 16th Century Literature, 19th Century Prose, Contemporary Novel. Topic listed in Schedule of Classes. May be repeated on different topic. (Variable)

## 730 Japanese

730:001. Elementary Japanese I-5 hrs.
For beginners. (Variable)
730:002. Elementary Japanese II - 5 hrs .
Continuation of 730:001. Prerequisite: 730:001 or consent of instructor. (Variable)
730:011. Intermediate Japanese I - 5 hrs.
Continuation of $730: 002$. Progressive development of writing, reading, and speaking skills through a sequence of exercises relating to daily practical living. Grammatical refinement using numerous illustrations of more difficult words on everyday topics. Prerequisite: 730:002 or consent of instructor. (Variable)

## 730:012. Intermediate Japanese II - 5 hrs.

Continuation of 730:011. Prerequisite: 730:011 or consent of instructor. (Variable)
730:101. Advanced Japanese I - 3 hrs.
Increased use of compounds. Review of more difficult characters. Introduction to Japanese classical literature. Prerequisite: 730:012 or consent of instructor. (Variable)
730:102. Advanced Japanese II - 3 hrs.
Continuation of 730:101. Prerequisite: 730:101 or consent of instructor. (Variable)

## 740 German

## 740:001. German Language and Culture I-3 hrs.

For beginners. Introduction to language and cultures of the Germanspeaking peoples. Not recommended for students who have had two or more years of German in high school or equivalent. Corequisite: 740:003. (Offered Fall and Spring)

## 740:002. German Language and Culture $11-3 \mathrm{hrs}$.

Continuation of 740:001 and 740:003. Not recommended for students who have had three or more years of German in high school or equivalent. Prerequisite: 740:001; 740:003; or equivalents. Corequisite: 740:004. (Offered Fall and Spring)
740:003. German Communication Practice $1 \mathbf{- 2}$ hrs.
Practice of basic language skills through guided exercises, including use of lab components. Not recommended for students who have had two or more years of German in high school or equivalent. Corequisite: 740:001. (Offered Fall and Spring)

## 740:004. German Communication Practice II - 2 hrs.

Continuation of 740:001 and 740:003. Not recommended for students who have had three or more years of German in high school or equivalent. Prerequisites: 740:001; 740:003; or equivalents. Corequisite: 740:002. (Offered Fall and Spring)

## 740:011. German Language and Culture III - $\mathbf{3}$ hrs.

Intermediate language course. Continued development of language skills. Review of essential German grammar. Discussion of cultural issues related to German-speaking countries. Prerequisite: 740:002; 740:004; or equivalents. (Offered Fall)

## 740:012. German Communication Practice III - 2 hrs.

Practice of language skills at intermediate level, including use of lab components. Prerequisites: 740:002; 740:004; or equivalents. (Offered Fall)
740:013. German Language and Culture IV - 3 hrs.
Continuation of 740:011 and 740:012. Intermediate language course. Continued development of language skills. Review and expansion of vocabulary and grammatical structures. Discussion of cultural issues related to German-speaking countries. Prerequisites: 740:011; 740:012; or equivalents. (Offered Spring)
740:014. German Communication Practice IV - 2 hrs.
Continuation of 740:011 and 740:012. Practice of language skills at intermediate level, including use of lab components. Prerequisites: 740:011; 740:012; or equivalents. (Offered Spring)
740:031. Introduction to German Literature in Translation - 3 hrs.
Understanding and appreciating basic terms of German language literatures in English translation through close reading of literary texts. (Variable)

## 740:100. Teaching German in the Elementary Schools - 1 hr .

Techniques and practice in teaching German at elementary school level. Students teach German in local schools for approximately one hour per week and meet with course instructor on regular basis. May be repeated twice. Prerequisite: consent of instructor. (Variable)

## 740:101(g). German Writing Practice - 2-3 hrs.

Development of writing skills and grammar review. Prerequisites: 740:013; 740:014; junior standing. (Variable)
740:102(g). Advanced Composition and Grammar Review - 2-3 hrs.
Improvement of writing skills through composition, in-class grammar review, and individual tutorial sessions. Prerequisite: junior standing. Prerequisite or corequisite: 740:013; 740:014; or equivalents. (Variable)
740:103(g). German Conversation - 2-3 hrs.
Development of oral fluency through systematically-guided conversations on civilization topics and free conversation on topics of current interest. Structural, morphological, and phonetic exercises designed to meet needs of individual participant. Prerequisites: 740:013; 740:014; or equivalents; junior standing. (Variable)
740:104(g). Introduction to German Literature - 3 hrs .
Selected major works of representative German authors. Application of language skills to literary analysis and introduction to critical theories. Prerequisites: 740:013; 740:014; or equivalents; junior standing. (Variable)
740:105(g). Stylistics - 3 hrs.
Introduction to stylistics analysis. Development of style in composition through study of excerpts from contemporary German works and literary translations into German. Prerequisites: 740:013; 740:014; or equivalents; junior standing. (Variable)

## 740:111. Business German - 3 hrs.

Introduction to current business concepts and practices in Germanspeaking countries. Reading and interpreting business information, and reading and writing basic business correspondence; accessing business news. Prerequisites: 740:011; 740:012; or consent of instructor. (Variable) 740:116(g). Post World War II Cuhture and Literature - 3 hrs .
Introduction to culture and literature of the two German States, Austria, and Switzerland, from 1945 to present: intellectual, artistic, and literary trends. Prerequisite: junior standing. Prerequisite or corequisite: 740:101 or equivalent. (Variable)
740:121(g). Special Topics in Language and Culture - 3 hrs.
Special topics and aspects of the discipline. May be repeated on different topic. Prerequisites: 740:101; 740:104; or equivalents; junior standing.
(Variable)
740:122(g). Special Topics in Literature - 3 hrs.
Special topics and aspects of the discipline. May be repeated on different topic. Prerequisites: 740:101; 740:104; or equivalents; junior standing. (Variable)

## 740:123(g). Civilization of German-Speaking Countries - 3 hrs.

Advanced-level study of geography, history, and culture of Germanspeaking countries. Prerequisite: junior standing. Prerequisite or corequisite: 740:101 or equivalent. (Variable)

## 740:126(g). German Summer Symposium: (Topic) - 2-6 hrs.

Intensive summer course designed to complement courses offered during the fall and spring semesters. Topic listed in Schedule of Classes. May be repeated on different topic. Prerequisites: 740:101 or equivalent; junior standing. (Variable)
740:127(g). Culture and Literature: 1918-1945 - 3 hrs.
Introduction to culture and literature of Germany and Austria between 1918 and 1945: intellectual, artistic, and literary trends. Prerequisite: junior standing. Prerequisite or corequisite: 740:101 or equivalent. (Variable)
740:128(g). Culture and Literature: Middle Ages to Baroque - 3 hrs.
Introduction to German culture and literature from the beginnings to the 18th century. Highlights of German culture and life as reflected in literary works, mythology, philosophy, religion, and the arts. Prerequisite: junior standing. Prerequisite or corequisite: 740:101 or equivalent. (Variable) 740:143(g). Culture and Literature: 18th and 19th Century - 3 hrs.
Introduction to German culture and literature from the Enlightenment to end of 19th century; highlights of German culture and life as reflected in literary works, the arts, philosophical texts, and historical documents. Prerequisite: junior standing. Prerequisite or corequisite: 740:101 or equivalent. (Variable)

## 740:147(g). Masterpieces of the Modern German Stage - 3 hrs.

Prerequisite: junior standing. Prerequisite or corequisite: 740:101 or equivalent. (Variable)

## 740:148(g). The Holocaust in Literature and Film - $\mathbf{3}$ hrs.

Examination of the different perspectives and developments of Jewish and non-Jewish voices in response to the Holocaust experience in literature and film within the context of the German-speaking cultures and beyond. Prerequisite: junior standing. (Variable)

## 740:150(g). Contemporary Germany and Austria - 3 hrs.

In-depth analysis of political and social developments and cultural trends of post-war Germany and Austria. Prerequisite: junior standing. Prerequisite or corequisite: 740:101 or equivalent. (Variable)
740:160(g). History of the German Language - 3 hrs.
Introduction to historical development of German. Prerequisite: junior standing. Prerequisite or corequisite: 740:101 or equivalent. (Variable)
740:181. Advanced Business German - 3 hrs.
Study of current business concepts and practices in German-speaking countries. In-depth analysis of business-related communications. Prerequisite: 740:111 or consent of instructor. (Variable)
740:185 (g). Introduction to Translation - 3 hrs .
Introduction to journalistic and technical translation using varied textual materials (public media, scholarly, and professional texts), from English to German and German to English. May be repeated once. Prerequisites: 740:101 or equivalent; junior standing. (Variable)
740:191. Bilingual Practicum - 1-4 hrs.
Participants meet on regular basis with instructor to acquire first-hand knowledge of foreign language methodologies through activities and class observations. Required for students enrolled in foreign-language teacher education program. Prerequisite: 740:101. Corequisite: 700:190. (Variable)

## 740:201. Composition and Stylistics - 3 hrs.

Study of stylistic devices; examination of principal morphological, syntactical, and semantic problems. May be offered for 4 hours on the sum-
mer study abroad program. (Variable)
740:225. Problems in Translation - 3 hrs.
Techniques of translation with journalistic and technical emphasey (Variable)

## 740:226. German Graduate Summer Symposium: (Topic) - 2-6 hrs.

Intensive summer course designed to complement courses offered during the fall and spring semesters. Topic listed in Schedule of Classes. May be repeated on different topic. Prerequisite: 740:101 or equivalent. (Variable) 740:250. German Literature in Review - 3 hrs .
Major periods of German literature, literary genres, and techniques Primarily for students who plan to take the M.A. comprehensives in Ger-1 man. Prerequisite: consent of instructor. (Variable)
740:289. Seminar - 3 hrs.
Various topics offered such as Baroque Poetry, Classical Drama, Contemd porary Prose Fiction, and East German Literature. Topic listed in Schedule of Classes. May be repeated on different topic. (Variable)

## 770 Russian

770:001. Russian Language and Culture I - 3 hrs.
Basic skills of listening comprehension, reading, speaking and writing Introduction to Russian and Soviet culture. Corequisite: 770:003. (Offered Fall)
770:002. Russian Language and Culture II - $\mathbf{3}$ hrs.
Continuation of 770:001. Prerequisites: 770:001; 770:003; or equivalents, Corequisite: 770:004. (Offered Spring)
770:003. Russian Communication Practice $1-2$ hrs.
Practice of basic language skills through guided exercises and activitiesd including use of lab components. Corequisite: 770:001. (Offered Fall)
770:004. Russian Communication Practice II - 2 hrs.
Continuation of 770:003. Prerequisites: 770:001; 770:003. Corequisite| 770:002. (Offered Spring)
770:011. Russian Language and Culture III - $\mathbf{3}$ hrs.
Continued development of basic skills with further enlargement of vocabulary. Prerequisites: 770:002; 770:004; or equivalents. Corequisite| 770:013. (Offered Fall)
770:012. Russian Language and Culture IV - 3 hrs.
Continues grammar study and emphasizes vocabulary building through readings and discussions. Prerequisites: 770:011; 770:013; or equivalents Corequisite: 770:014. (Offered Spring)
770:013. Russian Communication Practice III - 2 hrs.
Practice of Russian to enhance fluency, flexibility, and accuracy in all skills, including use of lab components. Prerequisites: 770:002; 770:004. Corequisite: 770:011. (Offered Fall)
770:014. Russian Communication Practice IV - 2 hrs.
Continuation of 770:013. Prerequisites: 770:011; 770:013. Corequisite( 770:012. (Offered Spring)
770:031. Introduction to Russian Literature in Translation - 3 hrs.
Understanding and appreciating basic forms of Russian language literature in English translation through close reading of literary texts. (Variable)

## 770:091. Bilingual Pre-Practicum - 1-6 hrs.

For second- and third-level student. Enables student to reinforce basic language skills through direct participation. May be repeated for maximum of 6 hours. Only 3 hours can be applied to a minor in Russian. Prerequisite: consent of instructor. (Offered Fall and Spring)
770:101(g). Advanced Russian Language and Culture I-3 hrs.
Completes grammar study and emphasizes vocabulary building through readings and discussion of expository prose. May be repeated once for undergraduate credit. Prerequisites: 770:012 or equivalent; junior standing. (Offered Fall)

770:102(g). Introduction to Russian Literature I-3 hrs.
Introduction to history and development of Russian literature from Pushkin to Tolstoy and the critical reaction to it. In English. Prerequisite: junior standing. (Variable)
770:103(g). Advanced Russian Language and Culture II - 3 hrs.
Continuation of 770:101. May be repeated once for undergraduate credit. Prerequisites: 770:101 or equivalent; junior standing. (Offered Spring) 770:104(g). Introduction to Russian Literature II - $\mathbf{3}$ hrs.
Continuation of 770:102. Introduction to literature of the Silver Age, pre- and post-revolutionary periods, and post-Soviet period. In English. Prerequisite: junior standing. (Variable)

## 770:109. Teaching Russian in the Elementary School - 1-2 hrs.

Techniques and practice in teaching Russian at elementary school level; weekly teaching experience in local school, plus class sessions. May be repeated twice. Prerequisite: consent of instructor. (Variable)
770:121 (g). Special Topics in Language and Culture - $2-3$ hrs.
Special topics and aspects of the discipline. May be repeated on different topic. Prerequisite: junior standing. Prerequisite or corequisite: 770:101. (Variable)

## 770:122 (g). Special Topics in Literature - 2-3 hrs.

Special topics and aspects of the discipline. May be repeated on different topic. Prerequisite: junior standing. Prerequisite or corequisite: 770:101. (Variable)
770:132(g). Nineteenth Century Russian Short Fiction - 3 hrs.
Representative short fiction from Sentimentalism to Realism. Prerequisites: 770:103 or equivalent; junior standing. (Offered even Falls)
770:134(g). Twentieth Century Russian Literature - 3 hrs.
Selections from Russian Symbolism, pre- and post-revolutionary literature to present. Prerequisites: 770:103 or equivalent; junior standing. (Offered odd Springs)
770:141 (g). Russian Culture and Civilization I-3 hrs.
Lectures and readings in Russian from the foundation of Kievan Rus through the mid-18th century. Additional readings in English supplemented by class discussions and oral and written reports in Russian. Prerequisites: 770:103; junior standing. (Offered odd Falls)
770:142(g). Russian Culture and Civilization II - 3 hrs.
Continuation of 770:141. Lectures and readings from the mid-18th century to present. Prerequisites: 770:103 or equivalent; junior standing. (Offered even Springs)
770:191. Bilingual Practicum - 1-3 hrs.
Participants meet on regular basis with instructor to acquire first-hand knowledge of foreign language methodologies through activities and class observations. Required for students enrolled in foreign-language reacher education program. Prerequisite: 770:101. Corequisite: 700:190. (Variable)
770:196. Senior Seminar - 3 hrs.
Various themes/topics offered. Topic listed in Schedule of Classes. Prerequisite: 770:103. (Variable)

## 780 Spanish

## 780:001. Elementary Spanish I-5 hrs.

For beginners. Not recommended for students who have had two or more years of Spanish in high school or the equivalent. (Offered Fall, Spring, and Summer)

## 780:002. Elementary Spanish II - 5 hrs.

Continuation of 780:001. Not recommended for students who have had three or more years of Spanish in high school or the equivalent. Prerequisite: 780:001 or equivalent. (Offered Fall, Spring, and Summer)

## 780:011. Intermediate Spanish - 5 hrs.

Thorough review of essential Spanish grammar; enlarges vocabulary and augments the skills of listening, reading, writing, speaking, and cultural
awareness. Prerequisite: 780:002 or equivalent. (Offered Fall and Spring) 780:053. Spanish for Special Purposes: $\qquad$ - 2-3 hrs.

Grammatical review and specialized vocabulary for practical professional situations; develops listening, reading, writing, and speaking skills; and provides a vehicle for cultural awareness. Prerequisite: 780:011 or equivalent. (Offered Fall and Spring)
780:055. Oral and Written Spanish - 4 hrs.
Development of communication skills, culturally, orally and in written form through selected readings, discussions, and exercises. Includes lab. Prerequisite: 780:011 or equivalent. (Offered Fall and Spring)
780:091. Bilingual Pre-Practicum - 1-6 hrs.
For second- and third-level students. Work with first- and second-level classes, reinforcing basic language skills and understanding of Spanish grammar. Micro-teaching. May be repeated for maximum of 6 hours. Only 3 credits may be applied to major or minor in Spanish. Prerequisite: consent of instructor. (Variable)

## 780:100. Teaching Spanish in the Elementary School - 1 hr.

Techniques and practice in teaching Spanish at elementary school level; weekly teaching experience in local school, plus class sessions. May be repeated once. Prerequisite: consent of instructor. (Offered Fall and Spring)

## 780:101. Advanced Writing - 3 hrs.

Analysis and practice in Spanish grammar and usage through writing and reading a variety of texts with attention to vocabulary enhancement and different communication strategies. Prerequisite: 780:055 or equivalent. (Offered Fall and Spring)

## 780:102(g). Advanced Spanish for Special Purposes:

-2-3 hrs.
Enhance speaking, writing, and cultural skills for particular professional or occupational situations. Prerequisites: 780:053 or 780:055 or equivalent; junior standing. (Variable)

## 780:103. Advanced Conversation and Reading - 3 hrs.

Further development of oral fluency. Conversation on current issues. Extensive vocabulary enhancement through readings and multimedia materials. Prerequisites: 780:055 or equivalent. (Variable)
780:109. Introduction to Hispanic Literature - 3 hrs.
Selected major works of representative Hispanic authors. Application of language skills to literary analysis and introduction to critical theories. Recommended for non-teaching majors. Prerequisite: 780:101 or 780:150 or equivalent. (Offered Fall and Spring)
780:105. Literary Miniatures - 2-3 hrs.
Introduction to analysis of short literary forms with application to pedagogy of literature. Recommended for teaching majors. Prerequisites: 780: 101 or 780:150 or equivalent. (Variable)
780:107. Introduction to Translation - 2-3 hrs.
Basic considerations regarding theoretical and applied translation and role of contrastive grammar in translation. Prerequisite: 780:101 or $\mathbf{7 8 0 : 1 5 0}$ or equivalent. (Offered Fall)

## 780:108(g). Introduction to Spanish Linguistics - $2-3 \mathrm{hrs}$.

Survey of the basic concepts of modern linguistics, as illustrated through Spanish phonology, morphology, syntax, and semantics. Prerequisites: 780:101 or 780:150 or equivalent; junior standing. (Offered Spring)
780:112. Survey of Spanish American Literature - 3 hrs.
Overview of Spanish American literature through works of representative authors of different periods and genres. Prerequisite: 780:104 or 780:105 or equivalent. (Offered Spring)
780:118. Survey of Spanish Literature - 3 hrs .
Overview of Spanish literature through works of representative authors of different periods and genres. Prerequisite: 780:104 or 780:105 or equivalent. (Offered Fall)

## 700:120. Latin American Culture and Civilization - 3 hrs.

Culture of Latin America as shaped by its geography, history, and pre-
history; and as revealed in its arts, sports, customs, traditions, and economic, social, and political institutions. Prerequisite: 780:101 or $780: 150$ or equivalent. (Offered odd Falls)
780:123. Spanish Culture and Civilization - 3 hrs.
Spanish cultural heritage as shaped by geography and history, and as revealed in its arts, sports, customs, traditions, and economic, educational, social, and political institutions. Prerequisite: 780:101 or 780:150 or equivalent. (Offered Spring)

## 780:127. Latinos in the United States - 3 hrs.

Major issues confronting Latinos living in the U.S.: history, immigration, economics, literary, and cinematographic representation. Prerequisite: 780:104 or 780:105 or equivalent. (Offered even Falls)

## 780:131. Topics in Spanish American Literature:

- 3 hrs.

Movements, themes, and authors in Spanish American narrative, poetry, essay, and drama; based on historical and aesthetic trends. Topic listed in Schedule of Classes. Prerequisite: 780:112 or 780:118. (Offered Spring) 780:135. Topics in Spanish Literature: $\qquad$ -3 hrs .
Movements, themes, and authors in Spanish narrative, poetry, essay, and drama; based on historical periods and aesthetic trends. Topic listed in Schedule of Classes. Prerequisite: 780:112 or 780:118. (Offered Fall)
780:141(g). Multimedia - 3 hrs:
Development of language, cultural and critical skills through Spanish language media (e.g., print, radio, television, film, and computer-based communications). Prerequisites: 780:101 or 780:150 or equivalent; junior standing. (Variable)

## 780:143(g). Pronunciation and Oral Proficiency - 2-3 hrs.

Practice in pronunciation with facus on oral proficiency. Prerequisites: 780:103 or 780:151 or equivalent; junior standing. (Variable)
780:145(g). Translation - 2-3 hrs.
Journalistic and technical translation using varied textual materials (public media, scholarly, and professional texts), from English to Spanish and Spanish to English. May be repeated once. Prerequisites: 780:107 or equivalent; junior standing, (Variable)
780:146(g). Topics in Language and Culture: $\qquad$ —

## 3 hrs.

Special topics and aspects of the discipline. May be repeated on different topic. Prerequisites: 780:101 or 78p:150; junior standing. (Variable)
780:147(g). Structure of Spanish - 2-3 hrs.
Contrastive grammar; syntactic, lexical, and/or cross-cultural sources of error. Prerequisites: 780:108 or equivalent; junior standing. (Variable)
780:150 (g). Written Communication - 3 hrs.
Topics taken from daily life; compositions written and corrected in the classroom; grammar review, and Spanish letter writing. Offered only in conjunction with the Spanish institutes abroad. Prerequisite: junior standing. (Offered Fall, Spring, and Summer)
780:151(g). Advanced Oral Communication - 3 hrs.
Topics of Spanish daily life; emphasis on idioms typical of that linguistic community. Offered only in conjunction with the Spanish institutes abroad. Prerequisite: junior standing. (Offered Fall, Spring, and Summer) 780:152(g). Contemporary Hispanic Culture - 3-5 hrs.
Contemporary Hispanic culture as it reflects and relates to its history and pre-history and current environment; emphasis on literature, architecture, painting, sculpture, and folk music. Offered only in conjunction with the Spanish institutes abroad. May be repeated for maximum of 5 hours. Prerequisite: junior standing, (Offered Fall, Spring, and Summer) 780:162(g). Spanish American Literature: $\qquad$ - 2-3 hrs.

Study of Spanish American literature by genre, period, theme, or author. Topic listed in Schedule of Classes. May be repeated on different topic. Prerequisites: 780:131 or 780:135; or equivalents; junior standing. (Variable)
780:163(g). Peninsular Literature: $\qquad$ - 2-3 hrs.

Study of Peninsular literature by genre, period, theme, or author. Topic
listed in Schedule of Classes. May be repeated on different topic. Prered uisites: 780:131 or 780:135 or equivalent; junior standing. (Variable) 780:164(g). Hispanic Literature: $\qquad$ $-2-3 \mathrm{hrs}$.
Combined study of Peninsular Spanish and Spanish American literaturd by genre, period, theme, or author. Topic listed in Schedule of Classe May be repeated on different topic. Prerequisites: 780:131 or 780:135 or equivalent; junior standing. (Variable)
780:166(g). Topics in Literature and Culture: $\qquad$ - 2-3 hrs. Perspectives on interrelationship of Spanish and/or Spanish Americadt literature and culture, based on historical periods, movements, theme genres and authors. Topic listed in Schedule of Classes. Prerequisite 780:131 or 780:135; senior standing. (Variable)
780:184(g). Spanish Summer Symposium: (Topic) - 1-6 hrs.
Intensive summer course designed to complement courses offered durin the fall and spring semesters. Topic listed in Schedule of Classes. May be repeated on different topic. Prerequisites: 780:101 or equivalent; junic standing. (Offered Summer)
780:191. Bilingual Practicum - 1-4 hrs.
Participants meet on a regular basis with instructor to acquire first-hand knowledge of foreign language methodologies through activities andil class observations. Required for students enrolled in foreign-languagt teacher education program. Prerequisite: 780:101. Corequisite: 700:190 (Offered Fall and Spring)
780:201. Literature and Critical Theory - 2-3 hrs.
Critical theory application to the study of literature of Spanish-speakiuf peoples, literary genres, and techniques, using intensive readings, lecture and student reports. Primarily for students planning to take the M.A comprehensives in Spanish. (Variable)
780:221. Hispanic Culture and Literature: $\qquad$ - 2-3 hrs.

Investigation into Hispanic cultures and civilizations as a product of their history and current environment. May be repeated twice on differend topic. (Variable)
780:231. Cervantes - 3 hrs.
Intensive study of Don Quijote. (Variable)
780:235. Golden Age Literature - 2-3 hrs.
Outstanding literary works of the Renaissance and Baroque eras. (Variable) 780:240. Analysis of Spanish - 2-3 hrs.
Study of Spanish syntax from traditional grammar point of view, with comparisons to findings of applied linguistics. Whenever possible, students will have first-hand experience with linguistic research. Prerequir site: 780:108 or consent of instructor. (Variable)
780:241. Old Spanish - 2-3 hrs.
Literary and linguistic study of selected early works. Prerequisite: 780:108 or consent of instructor. (Variable)

## 780:245. Translation Techniques - 2-3 hrs.

Strategies of translation with journalistic and technical emphases. Prereq-1 uisite: 780:145 or equivalent translation skills. (Variable)
780:252. Topics in Language and Culture: $\qquad$ - $1-3 \mathrm{hrs}$.

Study of linguistic, geographic, socioeconomic, historico-political aspect| of contemporary Hispanic societies, as reflected in art, folklore, and cul-1 ture. May be repeated on different topic. Offered only in conjunction with the Spanish institutes abroad. (Formerly 780:125) (Variable)
780:260. Spanish American Literature: $\qquad$ - 2-3 hours

Study of Spanish American literature by genre, period, theme, and/on author. May be repeated on different topic. (Variable)
780:261. Spanish Literature: $\qquad$ - 2-3 hrs.

Study of Spanish literature by period, theme, and/or author. May be repeated on different topic. (Variable)

## 780:262. Comparative Hispanic Literatures:

$\qquad$ - 3 hrs.

Comparative analysis of Spanish and Spanish American literature thematically, structurally, and/or stylistically. (Variable)

780:284. Spanish Graduate Summer Symposium: (Topic) - 1-6 hrs.
Intensive summer course designed to complement courses offered during the fall and spring semesters. Topic listed in Schedule of Classes. May be repeated on different topic. Prerequisite: 780:101 or equivalent. (Formerly 780:226) (Offered Summer)
780:289. Seminar: $\qquad$ - 2-3 hrs.

Various topics offered in areas of literature, culture, and language. Topic listed in Schedule of Classes. May be repeated on different topic. (Variable)

## 790 Portnguese

## 790:001. Basic Portuguese Language and Culture - 3 hrs.

Essential language and cultural forms. Corequisite: 790:010. (Offered Fall and Spring)

## 790:002. Intermediate Portuguese Studies - 3 hrs.

Communication skills for routine situations. Prerequisite: 790:001. Corequisite: 790:020. (Offered Spring)
790:010. Portuguese Practice - 2 hrs.
Practice of basic language skills and cultural literacy with live and electronic tutors. Corequisite: 790:001. (Offered Fall and Spring)
790:020. Portuguese Laboratory - 2 hrs.
Establishing situational language skills with live and electronic tutors. Prerequisites: 790:001; 790:010. Corequisite: 790:002. (Offered Spring)

## 790:031. Introduction to Portuguese and Hispanic Literatures in

 Translation - 3 hrs.Understanding and appreciating basic forms of Portuguese and Spanish language literatures in English translation through close reading of literary texts. May count toward Portuguese minor and dual major. (Variable)
790:060. Portuguese Language and Culture Studio - 2-4 hrs.
Authentic and creative language skills, cultural communications, and clinicals with live and electronic tutors. Prerequisite: 790:002, 790:020, or 790:140, or consent of instructor. (Variable)
790:101(g). Advanced Portuguese Communications - 3 hrs.
Sharpen skills in various communications strategies, using authentic materials in writing, reading, speaking, and comprehension. May be repeated once with consent of instructor. Undergraduates earn 3 credits; graduates earn 2 credits. Prerequisites: 790:060 or consent of instructor; junior standing. (Variable)
790:109. Bilingual Experiential Learning - 1-4 hrs.
For second-level students and higher. Experiential learning by applying language skills in educational and professional settings. May be repeated for maximum of 4 hours. Prerequisite: consent of instructor. (Offered Fall and Spring)

## 790:123(g). Multimedia Studies in Culture - 2-3 hrs.

Multimedia study of culture, history, and geography of Portuguesespeaking world. May be repeated once on different topic. Prerequisite: junior standing. Prerequisite for majors and minors: 790:101 or consent of instructor. Prerequisite for non-majors and non-minors: consent of instructor. (Variable)

## 790:140(g). Portuguese Language and Culture for Students of Spanish - 2-3 hrs.

Accelerated Portuguese for students and speakers of Spanish. Special closeness of the two languages and cultures facilitates rapid development of all skill areas in Portuguese. Prerequisite: 780:011 or equivalent; junior standing. (Variable)
790:180(g). Topics in $\qquad$ - 3 hrs.

Advanced study of various topics in language, cultures and literatures of Portuguese-speaking world. May be repeated on different topic. Prerequisites: 790:101 or equivalent; junior standing. (Variable)
790:191. Bilingual Practicum - 1-4 hrs.
Participants meet on regular basis with instructor to acquire first-hand
knowledge of foreign language methodologies through activities and class observations. Required for students enrolled in foreign-language teacher education program. Prerequisite: 790:060 or consent of instructor. Prerequisite or corequisite: 700:190. (Variable)

## 800 Mathematics

## TO MEET ANY COURSE PREREQUISITE, GRADE OF C- OR HIGHER IS REQUIRED IN THE PREREQUISITE COURSE.

800:004. Intermediate Algehra - 3 hrs.
Fundamental mathematical concepts; functions and graphs; solutions of equations; systems of equations and inequalities; matrices and determinants. Successful completion will satisfy the university's high school mathematics requirement. Does not count toward minimum hours required for baccalaureate degree. (Offered Fall and Spring)
800:023. Mathematics in Decision Making - 3 hrs.
Survey of mathematical ideas of particular use in analyzing information and forming and analyzing hypotheses. Topics include logical statements, probability, statistics, graphs, interest, and matrices. (Offered Fall, Spring, and Summer)

## 800:030. Mathematics for Elementary Teachers - 3 hrs.

Mathematics as problem solving, communication, connections, and reasoning with regard to tasks involving numeration, relationships, estimation, and number sense of whole and rational numbers, measurement, and geometry and spatial sense. Activities and models appropriate to elementary school mathematics are used to represent these topics. Prerequisite: UNI and cumulative GPA of 2.50 or better. (Offered Fall, Spring, and Summer)

## 800:037. Technology for Elementary School Mathematics Teachers - <br> 3 hrs.

Survey of technologies used to develop mathematical thinking in elementary grades. Technologies addressed include calculators, LOGO, spreadsheets, Geometer's Sketchpad, other educational software, and the internet. (Offered Fall and Spring)
800:043. Analysis for Business Students - 3 hrs.
Analysis and interpretation of data using numerical, graphical, and functional viewpoints; linear and exponential functions; modeling data using functions. No credit for students with credit in 800:046 or 800:056. (Offered Fall and Spring)

## 800:044. Trigonometry - 2 hrs.

Trigonometric functions, solution of triangles and applications of simple harmonic motions, polar coordinates, and vectors. No credit for students with credit in 800:046. (Offered Fall and Spring)

## 800:046. Elementary Analysis - 4 hrs.

Pre-calculus mathematics; equations and inequalities; logarithms, exponential and circular functions; analytic trigonometry, analytic geometry, mathematical induction; applications. Credit reduced to I hour for students with credit in 800:043 and to 2 hours for students with credit in 800:044. (Offered Fall and Spring)
800:048. Condensed Calculus - 4 hrs .
Survey of analytic geometry and elementary calculus with emphasis on applications. May not be applied to Mathematics major or minor. (Variable)

## 800:050. Matrices with Applications - 3 hrs.

Introduction to matrices, systems of linear equations, vector spaces and linear mappings, rank and inverses, determinants, characteristic values and characteristic vectors. No credit for students with credit in 800:076. Prerequisite: 800:046, or 800:043 and 800:044. (Variable)
800:056. Mathematics for Biological Sciences - 3 hrs.
Proportional reasoning, linear functions and linear regression, exponential functions, and logarithmic functions with scientific applications. No
credit for students with credit in $800: 043$ or $\mathbf{8 0 0 : 0 4 6}$. (Offered Fall and Spring)
800:060. Calculus I-4 hrs.
The derivatives and integrals of elementary functions and their applications. Prerequisite: 800:046, or 800:043 and 800:044, or equivalent.
(Offered Fall, Spring, and Summer)
800:061. Calculus II - 4 hrs.
Continuation of 800:060. Prerequisite: $C$ - or better in 800:060. (Offered Fall and Spring)
800:062. Calculus III - 4 hrs.
Continuation of $800: 061$. Prerequisite: C - or better in $800: 061$. (Offered Fall and Spring)
800:064. Elementary Probability and Statistics for Bioinformatics 3 hrs.
Descriptive statistics, basic probability concepts, confidence intervals, hypothesis testing, correlation and regression, elementary concepts of survival analysis. No credit for students with credit in 800:072. (Variable)
800:072. Introduction to Statistical Methods - 3 hrs.
Descriptive statistics including correlation and curve fitting. Intuitive treatment of probability and inferential statistics including estimations and hypothesis testing. No credit for students with credit in 800:064. Students with credit in $800: 172$ should not enroll in 800:072. (Offered Fall, Spring, and Summer)

## 800:074. Discrete Mathematics - 3 hrs.

Introduction to mathematical reasoning, sets, relations, and functions with applications in computer science. Prerequisites: 800:050 or 800:060; 810:030 or equivalent. (Variable)

## 800:076. Linear Algebra for Applications - 3 hrs.

Gaussian elimination; matrix algebra; vector spaces, kernels, and other subspaces; orthogonal projection; eigenvalues and eigenvectors. Prerequisite: 800:060. (Offered Fall and Spring)
800:080. Mathematics of Finance - 3 hrs .
Study of mathematics of financial transactions: simple and compound interest, annuities, amortization of indebtedness, bonds, depreciation, life annuities, and death insurance. Of special interest to actuarial and business students. Prerequisite: 800:060. (Offered Spring)
800:090. Mathematical Problem Solving - 1 hr .
Basic techniques used to solve challenging mathematics problems. Problems considered will come from a broad range of courses. Prepares students to take the William Lowell Putnam Examination and the Iowa Collegiate Mathematics Competition. May be repeated. (Offered Fall and Spring)
800:092. Introduction to Mathematical Modeling - $\mathbf{3}$ hrs.
Components of mathematical modeling. Formulation, interpretation, and testing of models. Prerequisite: four years of college preparatory mathematics, or 800:046, or 800:043 and 800:044. (Offered Fall and Spring)

## 800:096. Technology and Programming for Secondary Mathematics Teachers - $\mathbf{3}$ hrs.

Introduction to technologies used in grades 7-12 mathematics classrooms. Technologies include LOGO, spreadsheets, Geometer's Sketchpad and graphing calculators. Prerequisites: 800:060; 800:092. (Offered Spring)

## 800:111(g). Introduction to Algebraic Thinking for Elementary Teachers -4 hrs.

Investigation of problems involving patterns, variables, relations, functions, and their graphs. Exploration and representation of these problems using physical models and technology. Prerequisites: 800:030; 800:037; junior standing. (Offered Fall and Spring)
800:112(g). Introduction to Geometry and Measurement for Elementary
Teachers - 3 hrs.
Van Hiele levels of thinking. Investigation of two- and three-dimensional
concepts, rigid transformations, symmetry, and spatial sense. Prerequil sites: 800:030; 800:037; junior standing. (Offered Fall and Spring) 800:113(g). Topics in Mathematics for Grades K-8 - 3 hrs.
Investigation of ratio, proportion, percent; number theory; data analysir| patterns; and connections to algebra and geometry. Exploration of topic| in the context of the K-8 mathematics curriculum. Prerequisites: 800:030 800:037; junior standing. (Offered Fall and Spring)

## $\mathbf{8 0 0 : 1 1 4 ( g ) . ~ P r o b l e m ~ S o l v i n g ~ i n ~ M a t h e m a t i c s ~ f o r ~ E l e m e n t a r y ~ T e a c h e r s ~}$

-4 hrs.
Strategies for constructing and communicating a mathematics problem, solving process. Analysis of resources and strategies to generate mathematics tasks and to create an effective problem-solving environmenf Problem solving as a means of constructing mathematics knowledg Prerequisites: $800: 134$; at least one of $800: 111,800: 112,800: 113$; junio standing. (Offered Fall and Spring)

## 800:121(g). Applied Statistical Methods for Research - 3 hrs.

Inference about two or more population variances, multiple compani sons, categorical data analysis, linear and logistic regression, design of experiments, analysis of variance and covariance, repeated measures and random effects. Prerequisites: 800:072; junior standing. (Offered Spring, 800:134. Teaching Mathematics in the Elementary School - 3 hrs.
Effective instructional models and strategies for teaching elementar school mathematics; involves selecting and designing mathematical taskey creating an environment, and orchestrating discourse. Using and supple menting mathematics materials within a sound psychological framewori for making instructional decisions. Prerequisites: 800:030; UNI and cumulative GPA of 2.50 or better; full admission to teacher education is required. (Offered Fall, Spring, and Summer)

## 800:137. Action Research for Elementary School Mathematics Teachers

 -1 hr .Planning, conducting assessments, providing instruction, and evaluatin instructional effectiveness for selected mathematics topics in the elemend tary curriculum. Prerequisite: 800:134 or 800:190. (Variable)

## 800:140 (g). Intermediate Mathematical Analysis I-3 hrs.

Algebraic and topological structure of the reals; limits and continuity/ theory of differentiability of functions of a single real variable. Prerequi, sites: 800:062; 800:076; junior standing. (Offered Fall)
$800: 141(\mathrm{~g})$. Intermediate Mathematical Analysis II - 3 hrs.
Riemann integration; sequences and series of functions; introduction to Lebesgue integration. Prerequisites: 800:140; junior standing. (Offered Spring)
800:142(g). Dynamical Systems: Chaos Theory and Fractals - 3 hrs.
Historical background, including examples of dynamical systems; orbitt, fixed points, and periodic points; one-dimensional and two-dimensional chaos; fractals: Julia sets, the Mandelbrot set, and fractal dimension; computer programs and dynamical systems. Prerequisites: 800:061; 800:076; junior standing. (Offered odd Falls)
800:143(g). Combinatorics - 3 hrs.
Various ways to enumerate elements of a set. Appropriate for mathematics, mathematics education, computer science, and actuarial science students. Prerequisite: junior standing. (Offered Fall)
800:144(g). Elementary Number Theory - 3 hrs.
Topics from properties of integers, prime numbers, congruences, cryptography, Pythagorean triples, Diophantine equations, Fermat's last theorem, Fibonacci numbers, and the golden rectangle. Also, number theoretic connections to abstract algebra. Prerequisites: 800:160; junior standing. (Offered Spring)

## 800:146. Actuarial Examination Preparation - 1-2 hrs.

Strengthening student skills solving computational problems similar to those included on actuarial examinations. Analyzing and practicing appropriate choice of problem solving techniques and strategies. May be repeated for credit for preparation for different examinations. (Offered Spring)

800:149(g). Differential Equations - $\mathbf{3} \mathbf{~ h r s . ~}$
Elementary theory and applications of first order differential equations; introduction to numerical techniques of solving differential equations; solutions of nth order linear differential equations with constant coefficients. Prerequisites: 800:062; 800:076; junior standing. (Offered Fall) 800:150(g). Partial Differential Equations - 3 hrs.
Study of applied partial differential equations using heat, wave, and potential equations as basis; Fourier series and integrals; Laplace transformations. Prerequisites: 800:149; junior standing. (Offered odd Springs) 800:152(g). Introduction to Probability - 3 hrs.
Axioms of probability, sample spaces having equally likely outcomes, conditional probability and independence, random variables, expectation, moment generating functions, jointly distributed random variables, weak law of large numbers, central limit theorem. Prerequisites: 800:061; junior standing. (Offered Fall and Spring)

## 800:153(g). Actuarial Mathematics - 3 hrs.

Survival distributions and life tables, life insurance, life annuities, benefit premiums. Prerequisites: 800:080; 800:152; junior standing. (Offered Fall)
800:154(g). Introduction to Stochastic Processes - 3 hrs.
Markov chains, Poisson processes, continuous time Markov chains, renewal processes, Brownian motion and stationary processes. Prerequisites: $800: 152$; junior standing. (Offered Fall)
800:155(g). Differential Geometry - 3 hrs.
Analytic study of curves and surfaces in three-dimensional Euclidean space. Prerequisites: 800:062; 800:076; junior standing. (Offered odd Springs)

## 800:156(g). Introduction to Complex Analysis - 3 hrs.

Differentiation and integration of functions of a single complex variable; Taylor and Laurent expansions; conformal mapping. Prerequisites: 800: 062; junior standing. (Offered even Springs)
800:157(g). Statistical Quality Control - 3 hrs.
Exploratory data analysis, Shewhart control charts and their variations, process capability analysis, CUSUM charts, EWMA charts, sampling inspection by attributes and by variables, continuous sampling plans, application of design of experiments in quality engineering. Prerequisite: 800:152 or consent of instructor; junior standing. (Variable)
800:158(g). Topics in Actuarial Science - 3 hrs.
Topics from mathematics of life contingencies, risk theory, survival analysis, construction of actuarial tables, demography, graduation. May be repeated on different topic with consent of instructor. Prerequisites: 800:152; junior standing; consent of instructor. (Variable)

## 800:160(g). Modern Algebra I - 3 hrs.

Introduction to study of algebraic systems. Groups, rings, fields, homomorphisms and isomorphisms. Prerequisites: 800:061 or equivalent; 800: 076; junior standing. (Offered Fall and Spring)
800:161 (g). Linear Algebra I - 3 hrs .
Vector spaces, linear transformations, determinants, eigenvalues and eigenvectors, canonical forms, inner product spaces. Prerequisites: 800:160; junior standing. (Variable)
800:162(g). Modern Algebra II - 3 hrs.
Continuation of $800: 160$. Groups with operators, modules over rings, Sylow theorems, composition series, semi-simple and simple rings, field theory and introduction to Galois theory. Prerequisites: 800:160; junior standing. (Offered Spring)
800:164(g). Statistical Methods in Bioinformatics - 3 hrs.
Analysis of a DNA sequence, analysis of multiple DNA and protein sequences, BLAST. Prerequisites: 800:064; 800:152; junior standing. (Variable)
800:165(g). Introduction to Modern Geometry - 3 hrs.
Historical survey of Euclidean geometry and examination of its modern formulation; introduction to transformational geometry; elements of hy-
perbolic non-Euclidean geometry and its models in the Euclidean plane and space. Prerequisites: 800:060 or equivalent; junior standing. (Offered Fall and Spring)
800:167(g). Topology $1-3$ hrs.
Introductory study of metric spaces, completeness, topological spaces, continuous functions, compactness, connectedness, separability, product, and quotient spaces. Prerequisites: 800:062; 800:076; junior standing. (Variable)

## 800:168(g). Topology II - 3 hrs.

Continuation of $800: 167$. Two- and n-dimensional manifolds, orientable manifolds, the fundamental group of a space, free groups, covering spaces, application to geometry and knot theory, Prerequisites: 800:160; 800:167; junior standing. (Variable)
800:169(g). Mathematical Logic - 3 hrs.
Introduction to semantics and syntax of propositional and predicate calculus; applications to electrical networks and analysis of formal mathematical theories. Prerequisites: 800:060; junior standing. (Offered even Springs)

## 800:170(g). Loss Models - 3 hrs.

Applied probability methods used in modeling loss. Loss distributions, aggregate loss models, credibility theory and long term models. Prerequisites: 800:152; $800: 174$; junior standing. (Offered even Springs)
$800: 171(\mathrm{~g})$. Spatial Data Analysis - 3 hrs. .
Analysis and interpretation of spatial point processes, area, geostatistical and spatial interaction data. Applications to geographic data in real estate, biology, environmental, and agricultural sciences using S-Plus software. Prerequisites: 800:072 or 980:080; junior standing. (Same as 970:160g) (Offered odd Springs)

## 800:172(g). Statistical Methods - 3 hrs.

Descriptive statistics including graphical representation, central tendency and variation, correlation and regression; elementary probability; problems of estimation and hypothesis testing from an intuitive approach; use of statistical packages such as SAS or SPSS. Students with credit in 800:072 or $800: 174$ may not enroll in $800: 172$. Prerequisite: junior standing. (Variable)
800:173. Probability and Statistics - 3 hrs.
Descriptive statistics and graphical representations, basic concepts of probability and distributions, random variables, expectations, sampling theory, tests of statistical significance. Calculus is employed in developing and applying these ideas. Specific attention devoted to the use of technology in motivating and explaining concepts and techniques. Emphasis on applications appropriate for secondary school probability/statistics courses. No credit with credit in 800:172. Prerequisite: 800:061. (Offered Fall and even Springs)

## 800:174(g). Introduction to Mathematical Statistics - 3 hrs.

Sampling distribution theory, point and interval estimation, Bayesian estimation, statistical hypotheses including likelihood ratio tests and chi-square tests, selected nonparametric methods. Prerequisites: 800:062; 800:152; junior standing. (Offered Spring)
800:175(g). Regression Analysis - 3 hrs.
Regression analysis, analysis of variance, time series methods. Prerequisites: $800: 174$; junior standing. (Offered Fall)
800:176(g). Numerical Analysis I - 3 hrs.
Theory and application of standard numerical techniques dealing with nonlinear equations, systems of linear equations, interpolation and approximation, numerical differentiation and integration. Prerequisites: $800: 061 ; 800: 076 ; 810: 034$ or $810: 035$ or $810: 036$, or equivalent; junior standing. (Offered odd Falls)

## 800:177(g). Linear and Non-Linear Programming - 3 hrs.

Linear, non-linear, integer, and dynamic programming. Prerequisites: 800:061; 800:050 or 800:076; 810:034 or 810:035 or equivalent; junior standing. (Variable)

## 800:178(g). Numerical Analysis II - 3 hrs.

Theory and application of numerical techniques for solution of ordinary and partial differential equations. Advanced topics from interpolation, approximation, numerical linear algebra. Prerequisites: 800:176; junior standing. (Offered even Springs)
800:180(g). History of Mathematics: To the Calculus - 3 hrs.
Survey of mathematical activities of mankind to the advent of the calculus in the 17th century. Motives, influences, and methods affecting development of algebra, geometry, and number theory in Mesopotamian, Egyptian, Greek, Islamic, and Eastern civilizations. Prerequisite: junior standing. (Offered Fall and even Springs)
$\mathbf{8 0 0 : 1 8 1}(\mathrm{g})$. Philosophy of Mathematics - 3 hrs.
Consideration of views on foundations of mathematics and such topics as role and possible limitations of mathematics in scientific investigation; significance of logical constructs in mathematics. Prerequisites: Humanities course; one semester of calculus; at least one additional mathematics course; junior standing. (Variable)
$800: 182(\mathrm{~g})$. Introduction to Set Theory - 3 hrs.
Overview of Cantor's set theory. Informal introduction to the axioms of set theory; general relations and functions; order relations; the axiom of choice, Zorn's lemma, and well-ordering; ordinal and cardinal numbers and their arithmetics; the Cantor-Schroeder-Bernstein theorem. Prerequisites: $800: 160$ or $800: 165$ or $800: 169$; junior standing. (Offered even Falls)
800:184(g). Introduction to Automata Theory - 3 hrs.
Finite automata and their decision problems: perspectives from finitestate machines, neural networks, and regular sets. Introduction to Turing machines, computability, and the halting problem. Students may not earn credit in both 800:184 and 810:181. Prerequisites: 800:061; at least one 100-level mathematics course; junior standing. (Variable)

## $800: 185(\mathrm{~g})$. History of Mathematics: From the Calculus to the 21st Century - 3 hrs.

Survey of mathematical activities of mankind from development of calculus in the 17th century. Rise of analysis, and development of modern algebra, non-Euclidean geometries, and general axiomatic method in the 19th century. Set theory, topology, mathematical logic, and other integrating developments in 20th century mathematics. Prerequisites: 800:061; junior standing. (Offered Spring)
$800: 187$ (g). Formal Languages - 3 hrs.
Brief comparison of natural languages and formal languages. Grammars and their generated languages; the Chomsky hierarchy and corresponding automata theories; operations on languages; some solvable and unsolvable problems. Students may not earn credit in both 800:187 and $810: 182$. Prerequisites: $800: 184$ or $810: 181$; junior standing. (Same as 810:182g) (Variable)

## 800:188. The Teaching of Middle School/Junior High Mathematics 3 hrs.

Teaching strategies for grades 5-8; roles of content and methods; participation in a middle school/junior high teaching situation. Prerequisites: 200:128; 200:148; 6 hours of 100 -level courses in mathematics. (Offered Fall and Spring)

## $800: 189(\mathrm{~g})$. Geometric Transformations - 3 hrs.

Isometries and similarity transformations in the Euclidean plane and Euclidean space; preservation properties of isometries; existence and classification of isometries in the Euclidean plane; applications to concepts and problems in geometry, physics, and modern algebra, and to analysis of congruence and similarity. Prerequisites: 800:076; 800:165; junior standing. (Offered Spring)
800:190. The Teaching of Secondary Mathematics - 3 hrs.
Teaching strategies for grades $7-12$; roles of content and methods; participation in a secondary teaching șituation. Prerequisites: 200:128; 200:148; $250: 150 ; 800: 160 ; 800: 165 ; 800: 188$. (Offered Fall and Spring)

800:191(g). Contemporary Mathematics Curricula - 1-2 hrs.
Study and evaluation of innovative curriculum materials. Focus on earhy elementary, middle grades, or high school curriculum. May be repeated for a different curriculum level with consent of department. Prerequit sites: $800: 134$ or $800: 188$ or $800: 190$; junior standing. (Offered Summer) 800:192. Mathematics for Elementary Students with Special Needs -

1 hr .
Assessing, designing, and providing appropriate mathematical tasks for students with special needs. Prerequisite: $800: 134$ or $800: 190$. (Offered Fall and Spring)
800:193(g). Linear Algebra II - 3 hrs.
Inner product spaces, Gram-Schmidt orthonormalization, unitary opera tors and their matrices, bilinear forms, Hermitian forms, normed linear vector spaces. Prerequisites: 800:161; junior standing. (Variable)
800:194. Senior Mathematics Seminar - 1 hr.
Researching and writing a paper exploring specific theme, topic, or problem in mathematics, culminating with oral presentation to the class Prerequisite: senior mathematics major. (Offered Fall and Spring)
800:195. Undergraduate Research in Mathematics - 3 hrs.
Research on selected topic in mathematics with faculty supervision Presentation of written paper at departmental seminar. Prerequisitd completion of the major core with minimum GPA of 3.00 . (Offered Fall and Spring)
800:196(g). Applied Multivariate Statistical Analysis - $\mathbf{3}$ hrs.
Multivariate normal distribution, tests of significance with multivariatel data, discrimination and classification, clustering, principal components, canonical correlations, use of statistical computer packages. Prerequisited 800:076; 800:174; junior standing. (Variable)
800:198. Independent Study.
(Variable)
800:201. Mathematical Analysis I- 3 hrs.
The real numbers; topology of Cartesian spaces; continuous functions differentiation in Cartesian spaces. Prerequisite: 800:140 or consent of instructor. (Offered even Springs)
800:202. Mathematical Analysis II - 3 hrs.
Riemann-Stieltjes and Lebesgue integrals; integration in Cartesian spaces; improper and infinite integrals; infinite series. Prerequisite: 800:201. (Offered even Falls)

## 800:203. Complex Analysis I - 3 hrs.

Analyticity; differentiation and integration of functions of one compler variable; power series, Laurent series; calculus of residues. Prerequisites: 800:140; 800:156; or consent of instructor. (Offered odd Springs)
800:204. Complex Analysis II - 3 hrs.
Analytic continuation; harmonic functions; entire functions; conformal mapping; selected applications. Prerequisite: 800:203. (Variable)

## 800:210. Theory of Numbers - 3 hrs.

Mathematical study of integers: induction, divisibility, prime numbers, congruences, quadratic reciprocity, multiplicative functions. (Offered even Springs)
800:211. Teaching Algebra in the Middle Grades - 2 hrs.
Examination of literature and students' thinking related to algebraic concepts. Curriculum issues, teaching strategies, and implications of technology. Prerequisite: 800:215 or consent of department. (Offered Summer) . 800:213. Selected Topics in Mathematics for the Middle Grades -

2 hrs.
Investigation of mathematical topic(s), such as geometry, data analysis, probability, or number sense. Examination of a major mathematical idea including implications of research literature, and examination of relevant curriculum materials. May be repeated once on a different topic with consent of department. Prerequisite: consent of department. (Offered Summer)

800:214. Mathematical Problem Solving in the Middle Grades - 1 hr . Solving problems from a variety of mathematical topics such as linear programming, geometry, and probability. Analyzing problem-solving techniques and teaching strategies. Investigating issues related to implementing a problem-solving approach in the classroom. (Offered Summer)

## $800: 215$. Teaching Rational Numbers - 2 hrs.

Examination of literature, problems, and issues related to teaching fractions, decimals, ratios, proportion, and percent in grades 4-8. Exploration of innovative strategies for developing concepts, skills, and proportional reasoning. Implications of research and reform recommendations for the curriculum. (Offered Summer)

## 800:220. New Developments in Middle Grades Mathematics - 3 hrs.

Investigation of current recommendations for goals, content, instructional strategies, and curriculum of mathematics programs in grades 4-8. In-depth examination of selected content and implementation of a prob-lem-solving approach to instruction. Focus on application to classroom practice and planning for change for a selected topic. (Offered Summer)
800:221. Mathematics Literacy in an Information Age - 2 hrs.
Examination of applications and contributions of mathematics to other disciplines, the workplace, personal lives, and society. Investigation of shifting conceptions of mathematics and mathematics literacy in today's world. Diverse uses of mathematics illustrated. Prerequisites: 800:220; 800:236; 800:238. (Offered Summer)

## 800:222. Issues and Problems in Teaching Mathematics in the Middle

 Grades - 2 hrs.Issues and problems related to current reform in mathematics, including planning curriculum, assessing student learning, managing instruction, and providing for individual needs. Examination of related literature. Prerequisite: $\mathbf{8 0 0 : 2 2 0}$. (Offered Fall)

## 800:236. Mathematics for the Middle Grades Teachers I - 3 hrs.

Integrated, historical, and cultural study of development and structure of quantity, data, and chance. Focus on mathematical ways of knowing and verification. (Offered Spring)

## 800:237. Technology in Middle Grades Mathematics - 2 hrs.

Uses of technology in teaching and learning mathematics. Examination of research related to incorporating technology in the teaching of mathematics. (Offered Summer)
800:238. Mathematics for the Middle Grades Teacher II - 3 hrs.
Integrated, historical, and cultural study of development and structure of patterns, functions, relationships, and shapes. Focus on ways of knowing and verification. Prerequisite: 800:236. (Offered Fall)

## 800:240. Theory of Rings and Modules - 3 hrs.

Ring theory from factorization in commutative rings, rings of quotients, localization, rings of polynomials and formal power series, and elements of Galois theory. Module theory from exact sequences, free modules, projective and injective modules, tensor products, modules over principal ideal domains, and algebras. Prerequisite: 800:162 or consent of instruc-

## tor. (Offered even Falls)

## 800:245. Topics in Algebra - 3 hrs.

Topics from groups, noncommutative rings and algebras, and linear algebras, introduction to homological, Lie, and linear algebras. May be repeated on different topic with the consent of instructor. Prerequisite: 800:162 or consent of instructor. (Offered odd Springs)

## 800:246. Topics in the History of Mathematics - 3 hrs.

Topics from history of algebra, analysis, arithmetic, geometry, number theory, probability, and topology as they appear in the development of Mesopotamian, Greek, Islamic, Indian, Chinese, and Western civilizations. May be repeated on different topic with consent of instructor. Prerequisite: 800:180 or 800:185. (Offered even Falls)
800:263. Topics in Mathematical Logic and Set Theory - 3 hrs.
Topics from the predicate calculus and first-order mathematical theories;
the Godel completeness and incompleteness theorems; algebraic and many-valued logic; Boolean algebras, lattices, representation theorems, and models in set theory and mathematical logic; independence of the axioms of set theory (including the axiom of choice and the continuum hypothesis). May be repeated on different topic with consent of instructor. Prerequisite: 800:169 or 800:182, depending on the topic. (Variable) 800:265. Geometric Symmetry - 3 hrs .
Symmetry groups in the Euclidean plane and the geometric significance of normality. Finite and discrete symmetry groups in the plane: the rosette, frieze, and wallpaper groups. Applications to analysis of Escher-type designs and ornamental designs of Alhambra. Finite symmetry groups in Euclidean space. Prerequisites: $800: 160 ; 800: 189$. (Offered odd Falls) 800:266. Topics in Geometry - 3 hrs.
Topics from geometric convexity, non-Euclidean geometries, the BanachTarski paradox, inversions and mappings of the Euclidean sphere, geometric inequalities, the history of geometry, differential manifolds. May be repeated on different topic with consent of instructor. Prerequisite: consent of instructor. (Offered even Springs)
800:273. Topics in Probability and Statistics - 3 hrs.
Topics from correlation and regression analysis, analysis of variance and co-variance, non-parametric methods, order statistics. May be repeated on different topic with consent of instructor. Prerequisite: consent of instructor. (Variable)

## 800:291. Problems and Issues in Teaching High School Mathematics -3 hrs.

Course content decided by participants and instructor. Consideration of both mathematics content and methodology of the senior high school. Prerequisite: consent of department. (Variable)
800:293. The Secondary School Mathematics Curriculum - 3 hrs.
Comparison of current secondary curriculum with national standards, implementation, assessment, and the role of technology. (Variable) 800:299. Research.
(Variable)

## 810 Computer Science

## 810:021. Computing Skills and Concepts - 3 hrs.

Introduction to operation, applications, implications of computers, microcomputers, and network communications. Develops skill in current applications and sensitizes students to societal issues related to computing. (Offered Fall and Spring)
810:022. Microcomputer Applications and Systems Integration - 3 hrs. Emphasis on developing macros and programs, importing and exporting files between applications, solving and implementing applications and problems, and other more advanced topics. Examination of software such as word processing, spreadsheets, and database languages. Prerequisite: 810:021 or equivalent. (Offered Fall)
810:023. Microcomputer Systams - 3 hrs.
Functional description of microcomputer operating systems; commands and utilities, system and file organization, memory and file management, troubleshooting strategies, and networks. Prerequisite: 810:022 or any one-semester programming course. (Offered Spring)
810:030. Visual BASIC Programming - 3 hrs.
Programming using the language Visual BASIC. Broad coverage of language syntax, programming practice, and programming problems appropriate to the novice or end-use programmer using a personal computer. (Offered Fall and Spring)

## 810:034. COBOL - 3 hrs.

Examination of basic features of COBOL; emphasis on data processing techniques and structured programming methods. Sequential and indexed file structures, file maintenance, sorting, information retrieval, and design of reports. Concepts illustrated by business-type examples.

No credit for students earning credit in 150:034. Prerequisite: one of the following - 150:032, 810:030, 810:035, 810:036, or 810:061. (Offered Spring)
810:035. C Programming - 3 hrs.
Programming using the language $C$. Broad coverage of language syntax, programming practice, and programming problems appropriate for the systems and technical programmer. (Variable)

## 810:036. C/C++ Programming - 3 hrs .

Programming using the C and $\mathrm{C}++$ languages including the objectoriented paradigm. Broad coverage of language syntax and programming practice. Appropriate for developers of general computing applications and systems. Course presumes no prior programming experience. (Offered Fall)

## 810:041. Computer Organization - 3 hrs .

Introduction to basic computer structures and assembly language programming. Machine-level representation of character and numeric data; assembly-level machine organization; addressing methods and program sequencing; instruction sets and their implementations. Prerequisite: $810: 080$. Prerequisite or corequisite: $810: 062$. (Offered Fall and Spring)
810:061. Computer Science I - 4 hrs.
Introduction to computer programming in the context of a modern ob-ject-oriented programming language. Emphasis on good programming techniques, object-oriented design, and style through extensive practice in designing, coding, and debugging programs. Intended for majors and minors. (Formerly 810:051) (Offered Fall and Spring)

## 810:062. Computer Science II - 4 hrs.

Intermediate programming in an object-oriented environment. Topics include object-oriented design, implementation of classes and methods, dynamic polymorphism, frameworks, patterns, software reuses, limitations, exceptions, and threads. Prerequisite: 810:061. (Formerly 810:053) (Offered Fall and Spring)

## 810:063. Computer Science III - 4 hrs.

Intermediate programming using structured techniques. Use of algorithmic problem solving and functional decomposition in analysis, design, and implementation. Abstract data types including stacks, queues, lists, strings, trees, and graphs; implementation of these structures and basic algorithms for manipulating them. Prerequisites: 810:062; 810:080. (Formerly 810:052) (Offered Fall and Spring)

## 810:065. Computing for Bioinformatics I-3 hrs.

Intermediate programming with emphasis on bioinformatics. Includes file handling, memory management, multi-threading, B-trees, introduction to dynamic programming including Wunsch-Neddleman and Smith-Waterman algorithms for optimal alignments, exploration of BLAST, FASTA and gapped alignment, substitution matrices. Prerequisites: 810:062; 810:080. (Offered Fall)

## 810:066. Computing for Bioinformatics II - 3 hrs.

Advanced bioinformatics computing: Perl and CGl programming; data base facilities for bioinformatics; pattern matching with regular expressions; advanced dynamic programming: optimal versus local alignment, multiple alignments; data base mining tools, Entrez, SRS, BLAST, FASTA, CLUSTAL; graphical 3-D representation of proteins; phylogenic trees. Survey of instrumentation: Micro arrays, mass spectrometry, NMR. Prerequisite: 810:065. (Offered Spring)
810:080. Discrete Structures - 3 hrs.
Topics include propositional and first-order logic; proofs and inference; mathematical induction; sets, relations, and functions; and graphs, lattices, and Boolean algebra, all in the context of computer science. (Offered Fall and Spring)

## 810:088. Topics in Computing - 3 hrs.

Topics from recent developments in computing appropriate to students with limited computer science background, often relating to relatively sophisticated or technical use of computing or recent developments in
programming. May be repeated on different topic. Prerequisite: consem of instructor. (Variable)

## 810:112(g). User Interface Design - 3 hrs.

Examination of the theory, design, programming, and evaluation of interactive application interfaces. Built around a large design and implementation project that is completed in groups. Topics include humar capabilities and limitations, the interface design and engineering proces prototyping and interface construction, interface evaluation, and possibl. topics such as data visualization and the world wide web. Prerequisited 810:063 or 810:065; 3-hour 100-level computer science course, or consent of instructor for no non-majors; junior standing. (Variable)

## 810:114(g). Database Systems - 3 hrs.

Storage of, and access to, physical databases; data models, query languagt es, transaction processing, and recovery techniques; object-oriented and distributed database systems; and database design. Prerequisites: 810:063 or $810: 065$; junior standing. (Offered Fall)

## 810:115(g). Information Storage and Retrieval - 3 hrs .

Natural language processing; analysis of textual material by statistica4 syntactic, and logical methods; retrieval systems models, dictionary construction, query processing, file structures, content analysis; automatif retrieval systems and question-answering systems; and evaluation of retrieval effectiveness. Prerequisites: $810: 063$ or $810: 065$; junior standing (Offered Spring)
810:116(g). Projects in Information Science - 3 hrs.
Projects in information storage and retrieval; data base systems; informat tion mining and modeling; file structures; storage area networks; ques-tion-answering systems; transaction processing; natural language prof cessing; the analysis of textual material by statistical techniques; syntactil and logical methods; retrieval systems models, dictionary construction, and XML; query processing; content analysis; evaluation of retrieval ef $f_{-}$ fectiveness. Prerequisites: $810: 114$ or $810: 115$; junior standing; consent of instructor. (Offered Fall)
810:118(g). Topics in Information Science - 3 hrs.
Advanced topics in information storage and retrieval; data base systema information mining and modeling; file structures; storage area networks question-answering systems; transaction processing; natural languagt processing; the analysis of textual material by statistical techniques syntactic and logical methods; retrieval systems, dictionary construction and XML; query processing; content analysis; and evaluation of retrieval effectiveness. Prerequisites: $810: 114$ or $810: 115$; junior standing; consent of instructor. (Variable)

## 810:140(g). System Administration - 3 hrs.

Major concepts and mechanisms associated with computer systemt administration. Focus on issues surrounding user management, the configuration of services, and the coordination of distributed resources. Prerequisites: 810:147; junior standing. (Variable)

## 810:141(g). System Security - 3 hrs.

Topics include the need for security services, basics of cryptology, historical ciphers, public key paradigms, hardware and software implementay tions, and standard protocols used for securing mail, web, and electronic commerce. Prerequisite: 810:140; junior standing. (Variable)

## 810:142. Computer Architecture - 3 hrs .

Basic concepts of computer architecture with special focus on principle underlying contemporary uniprocessor design. Interaction of hardware and software, and consideration of efficient use of hardware to achieve high performance. Topics include instruction set design, processor design, pipelining, the memory hierarchy, design trade-offs, I/O systems, performance measurement, and multiprocessors. Prerequisite: 810:041. (Offered Fall)

## 810:143(g). Operating Systems - 3 hrs.

History and evolution of operating systems; process and processor management; primary and auxiliary storage management; performance
evaluation, security, and distributed systems issues; and case studies of modern operating systems. Prerequisites: 810:041; 810:063 or 810:065; junior standing. (Offered Spring)

## 810:145(g). Projects in Computer Systems - 3 hrs.

Projects in computer architecture, operating systems, networking, and parallel and distributed computing. Prerequisites: $810: 142$ or $810: 143$ or 810:147; junior standing; consent of instructor. (Offered Spring)
810:147(g). Networking - 3 hrs.
Network architectures and communication protocol standards. Topics include communication of digital data, data-link protocols, local-area networks, network-layer protocols, transport-layer protocols, applications, network security, and management. Prerequisites: 810:041; 810: 063 or 810:065; junior standing. Industrial Technology majors may enroll with: 330:037; 330:041; 330:042; 810:036. (Offered Fall)

## 810:148(g). Topics in Computer Systems - 3 hrs.

Advanced topics in computer architecture, operating systems, networking, and parallel and distributed computing. Prerequisites: 810:142 or $810: 143$ or $810: 147$; junior standing; consent of instructor. (Variable) 810:151. Topics in Programming - 1 hr.
Quick study of a specified programming language or environment for those with considerable programming experience. Language syntax and semantics, common problems solved using it, and best practices. Prerequisite: 810:063 or 810:065. (Offered Spring)

## 810:153. Design and Analysis of Algorithms - 3 hrs.

Algorithm design techniques such as dynamic programming and greedy algorithms; complexity analysis of algorithms; efficient algorithms for classical problems; intractable problems and techniques for addressing them; and algorithms for parallel machines. Prerequisite: 810:063 or 810:065. (Variable)

## 810:154. Programming Languages and Paradigms - 3 hrs.

Organization of programming languages; language design issues including syntax, data types, sequence control, and storage management; comparison of language features from object-oriented, imperative, functional, and logical paradigms. Prerequisite: 810:063 or 810:065. (Variable)
810:155(g). Translation of Programming Languages - 3 hrs .
Introduction to analysis of programming languages and construction of translators. Prerequisites: 810:154; junior standing. (Variable)

## 810:161(g). Artificial Intelligence - 3-4 hrs.

Models of intelligent behavior and problem solving; knowledge representation and search methods; learning; topics such as knowledge-based systems, language understanding, and vision; optional 1-hour lab in symbolic programming techniques: heuristic programming; symbolic representations and algorithms; and applications to search, parsing, and high-level problem-solving tasks. Prerequisites: 810:063 or 810:065; junior standing. (Variable)

## 810:162(g). Intelligent Systems - 3 hrs.

Design and implementation of programs that apply artificial intelligence techniques to problems such as design, diagnosis, and distributed problem solving. Emphasis on team design and development of large systems. Prerequisites: 810:161; junior standing. (Variable)

## 810:172 (g). Software Engineering - 3 hrs.

Study of software life cycle models and their phases-planning, requirements, specifications, design, implementation, testing, and maintenance. Emphasis on tools, documentation, and applications. Prerequisites: 810:063 or 810:065; junior standing. (Offered Fall and Spring)

## 810:173(g). Project Management - 3 hrs.

Examination of problems of organizing, controlling, managing, and evaluating a software project; software metrics and human input. Prerequisites: 810:172; junior standing. (Variable)

## 810:174(g). Real-Time Embedded Systems - 4 hrs.

Specification, design, and implementation principles and techniques for real-time embedded systems. Topics include programming languages
and paradigms, reliability and fault tolerance, concurrent programming, scheduling, and the interaction between hardware and software. Student teams will complete a significant real-time embedded software project. Prerequisites: 810:172; junior standing. (Variable)

## 810:175 (g). Software Testing - 3 hrs .

Taxonomy of software defects, approaches to identifying software defects, and test case development. Unit testing, functional testing, and software inspection. Prerequisites: 810:172; junior standing. (Variable)

## 810:178(g). Topics in Software Engineering - 3 hrs.

Advanced topics in software engineering including, but not limited to, analysis methods, design methods, and quality assurance. Prerequisites: 810:172; junior standing; consent of instructor. (Variable)

## 810:179. Cooperative Education - 1-4 hrs.

Application of classroom learning to field experience. Credit may not be applied to major or minor. Offered on credit/no credit basis only. (Offered Fall and Spring)
810:180. Undergraduate Research in Computer Science - 1-3 hrs.
(Offered Fall and Spring)
810:181(g). Theory of Computation - 3 hrs.
Topics include regular languages and grammars; finite state automata; context-free languages and grammars; language recognition and parsing; and turing computability and undecidability. Prerequisites: 800:074 or 810:080; junior standing. (Variable)

## 810:182(g). Formal Languages - 3 hrs.

Brief comparison of natural languages and formal languages; grammars and their generated languages; the Chomsky hierarchy and corresponding automata theories; operations on languages; some solvable and unsolvable problems. Students may not earn credit in both 800:187 and $810: 182$. Prerequisites: $800: 184$ or $810: 181$; junior standing. (Same as $800: 187 \mathrm{~g}$ ) (Variable)
810:188(g). Topics in Computer Science - 3 hrs.
Topics of general interest from any area of computer science, including systems, software, or theory. Prerequisite: junior standing. (Variable)
810:189. Seminar in Computer Science - $\mathbf{1 - 3}$ hrs.
Exploration of current topics in Computer Science. Analysis and oral presentation of technical materials in the area. Requires a research paper on a specific issue. Maximum of 3 hours may be applied toward graduation. Prerequisite: junior standing. (Variable)

## 810:214. Database Management Systems - 3 hrs.

Database system concepts, physical data organization, the network model and the DBTG Proposal, the hierarchical model, the relational model, relational query languages, design theory of relational databases, query optimization, and normalization. Prerequisite: consent of instructor. (Variable)
810:215. Problems in Information Storage and Retrieval - 3 hrs.
Study of current research in advanced natural language processing; analysis of natural language text by statistical, syntactic, and logical methods; retrieval systems models, dictionary construction, query processing, file structures, and content analysis; automatic retrieval systems and ques-tion-answering systems; and evaluation of retrieval effectiveness. Prerequisite: consent of instructor. (Variable)

## 810:240. Computer Systems - 3 hrs.

Survey of issues in computer system analysis and design. Topics include single-processor, multi-processor, and networked architectures. Emphasis on relationship between system hardware and software. Prerequisite: $810: 142$ or $810: 143$. (Variable)

## 810:241. Distributed Systems - 3 hrs.

Overview of basic concepts of distributed systems. Topics may include distributed machine architecture, distributed programming, distributed file systems, fault tolerance, security issues, load balancing, process migration, and distributed performance measurement. Prerequisite: consent of instructor. (Variable)

## 810:248. Topics in Computer Systems - 3 hrs.

Advanced topics in computer architecture, operating systems, networking, and distributed computing. May be repeated on a different topic. Prerequisites: 810:240. (Variable)

## 810:250. Applying Education Theory to Computer Science Teaching 1 hr .

Application of learning and pedagogical theory and principle to teaching of computing. May be repeated for maximum of 3 hours. Corequisite: 200:214 or 240:240 or 250:205. (Variable)

## 810:251. Computers, Computer Science, and Education - 3 hrs.

Survey of history and applications of computers, the field of computer science, and use of computers in education. Prerequisite: consent of department. (Variable)

## 810:253. Problems in Teaching Computer Science - 3 hrs.

Examination and application of research to solution of problems relating to curriculum development, pedagogy, and management of computer science education; public presentation of course project. Prerequisites or corequisites: 200:214; 240:240; 250:205; 810:250; 810:251. (Variable)
810:255. Computer Science Instructional Software - 3 hrs.
Seminar providing opportunity for examination of instructional design principles, practice, and research and their application to development of instructional applications for computer science; public presentation of course project. Prerequisite: 810:251. (Variable)
810:261. Problems in Artificial Intelligence - 3 hrs.
Topics include philosophy of AI, knowledge representation, search, natural language, speech understanding, vision, planning, learning and learning techniques, and knowledge-based systems and system organization and system-building techniques. Prerequisite: 810:161. (Variable)
810:262. Machine Learning - 3 hís.
Survey of computational approaches to learning. Topics include inductive learning, explanation-based learning, case-based learning, analytical learning, comparison and evaluation of learning algorithms, cognitive modeling, and relevant psychological results. Prerequisite: 810:161. (Variable)
810:270. Algorithms - 3 hrs.
Survey of analysis and design of algorithms. Topics include algorithm design techniques, efficient algorithms for classical problems, and intractable problems and techniques for solving them. Prerequisite: 810:153. (Variable)

## 810:278. Topics in Software Engineering - 3 hrs.

Advanced topics in software engineering such as analysis methods, design, development, quality assurance, and testing. May be repeated on different topic. Prerequisite: 810:172. (Variable)
810:280. Theoretical Foundations of Computing - 3 hrs.
Survey of theoretical models of computation and basic theory of computability. Topics include Turing machines, undecidability, NP-completeness, and computational complexity. Consideration of applications of theory to contemporary problems in computing. Prerequisite: 810:181. (Variable)

## 820 Science and Science Education

820:031. Inquiry into Physical Science - 4 hrs.

Inquiry-oriented introduction to concepts and processes drawn from chemistry, earth science, and physics using active investigation for those considering Elementary Education major. Integrated lecture/lab for 4 periods; plus 1 hour arranged. For Elementary Education majors only. Prerequisite: student must have satisfied university entrance requirements in English and Mathematics (Offered Fall and Spring)
820:032. Inquiry into Life Science - 4 hrs.
Exploration of fundamental concepts of modern biology through active investigation. Includes ecology, energy, diversity, and life cycles using a
standards-based teaching approach. Integrated lecture/lab for 4 period plus 1 hour arranged. For Elementary Education majors only. Prereat uisite: student must have satisfied university entrance requirementw in English and Mathematics. (Offered Fall and Spring)
820:113(g). Techniques for Science Teachers - 1-3 hrs.
Spectrum of options to help science teachers improve their teachin Topics may include teaching strategies, laboratory techniques, or learniry psychologies that apply to teaching various science disciplines and age levels. Topic listed in Schedule of Classes. Application to major require advisor approval. Prerequisite: junior standing; consent of instructul (Variable)
820:130(g). Experiences in Elementary School Science - 2 hrs.
Development of understanding science as an investigative process and how this relates to elementary science teaching. Seminar discussions and field experiences in applying knowledge of science content and pedagot to working with elementary-level students. Prerequisites: two coursel from $820: 181,840: 181$, or $870: 181$; junior standing. (Offered Fall) 820:132(g). Integrating Activities in Envirenmental Education - 3 hrs. Introduction of a variety of environmental education curricular materit als, and emphasis on their integration into K-12 curricula. Includes woril on incorporating national environmental education standards. Lectur discussion, 3 hrs./wk., plus hours arranged. Prerequisite: junior standind (Variable)
820:140. Environment, Technology, and Society - 2 hrs.
Emphasis on relationships and interactions of physical, biological, tech-1 nological, and cultural components of environment. Study of selectef interdisciplinary problems. Elaborates on student's previous universia experience and develops environmental literacy. Prerequisites: studer must have satisfied university entrance requirements in English and Mathematics; completion of both Life Sciences and Physical Scienct requirements; junior or senior standing. (Offered Fall, Spring, and Sum mer)
820:150. Science, Mathematics, and Technology in the Americas -
3 hrs .
Surveys the unique contributions made by indigenous and immigratl populations to the development of science, mathematics, and technology in the Americas. Interdepartmentally team-taught. Prerequisites: junio or senior standing, or consent of instructor. (Variable)
820:181. Investigations in Physical Science - 4 hrs.
Introduction to concepts and theories of physical science and modelin of effective teaching strategies related to elementary school level. Topy ies include electricity, magnetism, light, solutions, acids and bases, and states of matter. Discussion and/or lab, 5 periods. Prerequisite: 820:031 (Offered Spring)
820:189. Seminar in Environmental Problems - 1 hr .
Exploration of current topics by student teams. Team examination of various facets of an issue, focusing on development of a factual resume of natural, political, economic, and humanistic data which will be integratel for use in developing potential solutions. Value clarification activitied (Variable)
$820: 190(\mathrm{~g})$. Orientation to Science Teaching - 3 hrs.
Focus on particular issues in secondary science classrooms with regard to instructional strategies, assessment, planning, and management. Currend national and state trends are also highlighted. Required for licensure to teach secondary science; to precede student teaching. Discussion, 3 perio ods. 15 hours of field experience in classroom setting. Prerequisites: 200: 128; 200:148; 250:150; a major or minor in a science area or consent of instructor; junior standing. Prerequisite or corequisite: 820:196. (Offered Fall and Spring)
820:191. Undergraduate Research in Science Education - 1-3 hrs.
Research activities under direct supervision of Science Education faculth, members. May be repeated for maximum of 4 hours. Prerequisites: con ${ }^{2}$ sent of instructor and department. (Variable)

820:193(g). Current Curricula in the Physical Sciences - 3 hrs .
Philosophy, methods, and materials for Grades 6-12 physical science including physics, chemistry, and earth science. Examination and evaluation of current curricular materials, curriculum development, and appropriate assessment strategies. Fifteen hours of field experience in secondary school classrooms. Prerequisites: 820:190; 820:196; junior standing. (Offered Fall)
820:195. Science Teaching Seminar - 1 hr .
Discussion of various current science teaching topics. Sample topics include current science education research, innovative teaching and assessment strategies, science standards and benchmarks. Discussion, 1 period. Prerequisite: junior standing. (Variable).

## 820:196. Current Technologies in Science Teaching - 2 hrs.

Exploration of and instruction in current educational technologies to facilitate science teaching. Primary attention given to computer, video, and calculator applications and their supporting materials. Discussion/lab, 3 periods. Prerequisite: major or minor in a science teaching program or consent of instructor. (Offered Fall and Spring)
820:198. Independent Study.
(Variable)
820:200. The History, Philosophy, and Nature of Science - 2 hrs.
Examination of the nature of science and major philosophical developments of science throughout history, and the implications to the science classroom. Discussion 2 hrs./wk. (Variable)
820:213. Teaching-Learning Models in Science Education - 2 hrs.
Survey of learning theories from behaviorism to constructivism and the way those theories are translated into practice through various pedagogies. Prerequisite: 200:148 or equivalent. (Variable)
820:270. Special Problems in Science Education - 1-6 hrs.
Problems selected according to needs of students. Prerequisite: consent of chairperson of Science Education Faculty. (Variable)
820:290. Trends in Science Education - 2 hrs.
Compares contemporary reform movements to past trends in science education from the late 1800 s to the present. Discussion, $2 \mathrm{hrs} . / \mathrm{wk}$. (Variable) 820:294. Developing Science Curricula - 2 hrs.
Analysis and design of science curricula, with attention to articulation K-12. Prerequisite: 820:190 or equivalent. (Variable)
820:299. Research.
(Offered Fall, Spring, and Summer)

## 830 Environmental Science

## 830:130. Environmental Science - 3 hrs.

Functional and holistic approach to understanding the Earth and the interactions of its non-living and living components. Regulatory issues, environmental ethics, environmental law, and scientific principles. Prerequisites: 840:052; 860:048; 920:024 or both 920:053 and 920:054. (Offered Spring)

## 830:165(g). Environmental Health Science - 3 hrs.

Comprehensive survey of the interaction between human health and the quality and state of the natural environment. Prerequisite: junior standing. (Same as 410:165g) (Offered odd Springs)

## 830:166 (g). Environmental and Occupational Health Regulations -

 3 hrs.Overview of environmental and occupational safety laws applied to the practice of environmental science. Emphasis on application of the legislation with a focus on regulations. Includes major environmental laws such as the National Environmental Policy Act, Clean Air Act, Clean Water Act, and the Occupational Safety and Health Act. Includes site visits. Prerequisite: junior standing. (Same as $410: 166 \mathrm{~g}$ ) (Offered even Springs)
830:195. Environmental Science/Technology Internship - 1-10 hrs.
Supervised work experience in conjunction with academic project con-
ducted under faculty guidance. May be repeated for maximum of 12 hours. Prerequisite: consent of department head. (Offered Fall, Spring, and Summer)

## 830:200. Environmental Biology - 3 hrs.

Advanced topics in physiological ecology, community ecology, environmental microbiology, ecological genetics, bioenergetics, and biodiversity. (Offered odd Falls)

## 830:235. Topics in Environmental Chemistry - 3 hrs.

Advanced topics in chemistry for environmental science and technology. Topics include water, air, and geochemistry; environmental chemistry, measurement techniques, and chemical ecology. (Offered odd Springs)

## 830:250. Global Systems - 3 hrs .

Advanced topics in global systems for environmental science and technology. Topics include surface and groundwater hydrology, meteorology, atmospheric physics, and oceanography to gain an understanding of physical and geological processes that influence and are influenced by earth's biosphere. (Offered even Falls)

## 830:285. Readings in Environmental Science/Technology - $\mathbf{1 - 1 0}$ hrs.

Independent readings in environmental science/technology from selected list approved in advance. Prerequisite: consent of department head. (Offered Fall, Spring, and Summer)
830:289. Environmental Science/Technology Seminar - 1 hr.
Current topics in environmental science/technology. Students will present one seminar per year. Prerequisite: must be currently enrolled in Environmental Science graduate program. (Offered Fall and Spring)
830:292. Environmental Analysis - 3 hrs .
Laboratory methods and techniques in environmental science with emphasis in measurements, chemical constifuents, and biological parameters important to understanding environmental processes. Prerequisite: enrolled in graduate studies in Biology, Chemistry, or Environmental Science/Technology and Health. (Offered even Falls)
830:299. Research - 1-9 hrs.
Prerequisite: must be currently enrolled in Environmental Science graduate program. (Offered Fall and Spring)

## 840 Biology

## 840:012. Life: The Natural World - 3 hrs.

Examines living organisms with an emphasis on how the natural world functions as a system and how plants and animals, including humans, interact. Prerequisite: student must have satisfied university entrance requirements in English and Mathematics. (Offered Fall and Spring)

## 840:013. Life: The Natural World - Lab - $\mathbf{1} \mathbf{~ h r}$.

Activities illustrating the importance, origins, and maintenance of biodiversity with a focus on the interactions among organisms and between organisms and the environment. Prerequisite: student must have satisfied university entrance requirements in English and Mathematics. Prerequisite or corequisite: 840:012. (Offered Fall and Spring)

## 840:014. Life: Continuity and Change - 3 hrs.

Introduction to contemporary topics in biology. Emphasis on study of gene structure and function and applications of biology to human concerns. For Biology majors and minors counts only for university elective credit. Prerequisite: student must have satisfied university entrance requirements in English and Mathematics. (Offered Fall, Spring, and Summer)
840:015. Life: Continuity and Change - Lab - 1 hr .
Process of science and application of biology to human concerns stressed through student activities involving basic life science concepts encompassing cell structure and function, human genetics, and disease transmission. Emphasis on assisting students in understanding role of biology in our present society. Lab, 2 periods. Prerequisite: student must have satisfied university entrance requirements in English and Mathematics.

Prerequisite or corequisite: 840:014 or equivalent. (Offered Fall, Spring, and Summer)

## 840:033. Principles of Microbiology - 3 hrs.

Basic concepts and practical applications of microbiology in medicine, immunology, sanitation, and food preparation in daily life. Designed for students majoring in areas other than the sciences. For Biology majors and minors counts only for university elective credit. Sections may be offered exclusively for nurses in training. Discussion, 2 periods; lab, 2 periods. (Offered Fall)

## 840:051. General Biology: Organismal Diversity - 4 hrs.

Study of organismic biology emphasizing evolutionary patterns and diversity of organisms and interdependency of structure and function in living systems. Discussion, 3 periods; lab, 2 periods. (Offered Fall, Spring, and Summer)

## 840:052. General Biology: Cell Structure and Function - $\mathbf{4} \mathrm{hrs}$.

Study of cells, genetics, and DNA technology emphasizing the chemical basis of life and flow of information. Discussion, 3 periods; lab, 2 periods. (Offered Fall, Spring, and Summer)

## 840:060. Carears in Biology:_ 2 hrs.

Assists in career planning. Self-assessment, career opportunities, information on requirements, resumes, and application procedures in biology and related fields. Offered on credit/no credit basis only. For Biology majors and minors counts only for university elective credit. (Offered Spring)

## 840:084. Introduction to Natural History Interpretation - 3 hrs.

Exploration and analysis of the skills, settings, characteristics, domains, and experiences of the Natural History Interpreter. Interpretive presentation development and initiation of a Natural History Interpretation Portfolio for those pursuing the minor in Natural History Interpretation. Discussion, 3 periods. Prerequisites: 840:051; 840:052. (Offered even Springs)
840:009. Seminar - $1 \mathbf{h r}$.
(Variable)

## 840:101. Anatomy and Physiology I-4 hrs.

Structure and function of organ systems of human body. For students in allied health fields or other university-approved programs. Others must have consent of department head. For Biology majors and minors, counts only for university elective credit. Prerequisites: 840:051; 840:052; 860: 044 and $860: 048$, or $860: 061$ or $860: 070$, or consent of department head. (Offered Fall, Spring, and Summer)

## 840:102. Anatomy and Physiology II - 4 hrs.

Continuation of $840: 101$. For students in allied health fields or other university-approved programs. Discussion, 3 periods; lab, 2 periods. Prerequisite: C- or better in $840: 101$ or $840: 106$. (Offered Fall, Spring, and Summer)

## 840:103. Applied Ecology and Conservation - 4 hrs.

Impacts of human settlement in the Midwest on biodiversity, including overhunting, river channelization, wetland drainage, and agricultural intensification. Critical analysis of conservation initiatives. Field experience locating endangered habitat using topographic soils maps. Lecture/discussion, 3 periods; field and lab, 3 periods; arranged field trip. Prerequisites or corequisites: 840:051; 840:052; 860:044 and 860:048, or 860:070. (Offered Spring)

## 840:106. Vertebrate Anatomy - 4 hrs.

Consideration of the origin and evolution of vertebrates and comparison of vertebrate structure and function. Discussion, 2 periods; lab, 4 periods. Prerequisites or corequisites: 840:051; 840:052; 860:044 and 860:048, or $860: 070$. (Offered Fall and Spring)

## 840:112. Invertebrate Zoology - 4 hrs.

Morphology, physiology, phylogeny, taxonomy, and ecology of the invertebrates. Discussion, 2 periods; lab, 4 periods. Prerequisites: 840:051; 840:052; 860:044 and 860:048, or 860:070. (Offered Spring)

840:114(g). Comparative Animal Physiology - 3 hrs.
Physical and chemical basis of cellular/organ functions in various animals. Discussion, 3 periods. Prerequisites: $840: 140 ; 860: 063$ or $860: 12$ G| junior standing. (Offered Spring)
840:115(g). Comparative Animal Physiology Laboratory - $1 \mathbf{h r}$.
Laboratory experience in comparative animal physiology. Cellular and organ physiology studied in a variety of animals. Lab, 3 periods. Prerequisite: junior standing. Prerequisite or corequisite: $840: 114$. (Offered Spring)
840:120. Plant Diversity and Evolution - 3 hrs.
Form and function in vegetative and reproductive organs in all plant divisions, from algae to flowering plants, and their importance in evolutionary thought and plant classification. Lecture, 2 periods; lab, 2 periods. Prerequisites: $840: 051 ; 840: 052 ; 860: 044$ and $860: 048$, or $860: 07$ (1 (Offered Spring)
840:122(g). Plant Physiology - 4 hrs.
How plants work: uptake and use of water and materials, synthesis and transport of organic compounds, growth and development, and responses to environment. Lecture, 3 periods; lab, 3 periods. Prerequisitel 840:140; 860:063 or $860: 120$; junior standing. (Offered Spring)
840:124. Plants for Human Use - 3 hrs.
Emphasis on interrelationships between plants and people, including impact of plants on human history. Topies include food, herbs, spice beverages, forestry, textiles, dyes, and medicines. Discussion, 2 period lab, 2 periods. Prerequisites: 840:051; 840:052; 860:044 and $860: 048$, or 860:070. (Offered Spring)
840:126. Plant-Microbe Interactions - 3 hrs.
Beneficial and detrimental interactions between microbes and planty Plant resistance to diseases, development of pathogenicity in microd organisms, and social impacts of plant diseases. Symbioses involvint fungi and bacteria and their impacts on plant growth and agriculturi practices. Lecture, 3 periods. Prerequisites: 840:051; 840:052; 860:044 and 860:048, or 860:070. (Variable)

## $840: 128(\mathrm{~g})$. Cell Biology - 4 hrs.

Foundation in cellular structure, organization, and function, with emphasis on molecular aspects of gene regulation, signal transduction, and cell cycle control. Laboratory will correlate with lecture topics and will also emphasize developing laboratory skills and improving analytice and writing abilities. Discussion, 3 periods; lab, 3 periods. Prerequisited $840: 140 ; 860: 063$ or $860: 120$; junior standing. (Offered Spring)

## 840:130. Molecular Biology of the Cell - 3 hrs.

Introduction to the molecular, biochemical, and cellular structure and function of cells, DNA structure and functions, and the translation of genetic information into functional structures of living cells. DNA replication, transcription of genes, and synthesis and processing of proteins will be emphasized. Discussion, 3 periods. Prerequisites: 840:051; 840:052; 860:044 and 860:048, or 860:070. (Offered Spring)
840:131(g). Animal Behavior - 4 hrs.
Mechanisms, adaptive significance, evolution, and ecology of behavior and sociality. Discussion, 3 periods; lab, 2 periods. Prerequisites: 840:140; junior standing. (Offered Fall)

## 840:132. Parasitology - 3 hrs.

Examination of parasite life cycles and host-parasite relations with primary emphasis on human pathogens and associated diseases, and parasite identification. Study of parasitic protozoans, worms, and invertebrates. Discussion, 2 periods; lab, 2 periods. Prerequisites: 840:051; 840: $052 ; 860: 044$ and $860: 048$, or $860: 070$. (Variable)
840:137(g). Vertebrate Physiology Laboratory - 1 hr .
Laboratory experience in experimental vertebrate physiology. Focus on organ and cellular aspects of physiology. Lab, 3 periods. Prerequisite or corequisite: 840:138; junior standing. (Offered Fall)

## 840:138(g). Vertebrate Physiology - 3 hrs.

Functions of organ systems in vertebrates; emphasis on human body. Discussion, 3 periods. Must be taken with 840:137 if used to fulfill biology core requirement. Prerequisites: 840:140; 860:063 or 860:120; junior standing. (Offered Fall)

## 840:140. Genetics - 4 hrs.

Analytical approach to classical, molecular, and population genetics. Discussion, 3 periods; lab, 2 periods. Prerequisites: 840:051; 840:052; 860:044 and $860: 048$, or $860: 070$. (Offered Fall and Spring)

## 840:142(g). Evolutionary Biology - 3 hrs.

Conceptual overview of evolutionary theory, mechanisms of evolutionary process, speciation and major evolutionary events. Discussion, 3 periods. Prerequisites: 840:140; junior standing. (Offered Spring)
840:143 (g). Biogeography and Origins of Diversity - 3 hrs.
Readings and discussion interrelating how biodiversity and its geographical distribution have been shaped by earth history, ecology, and evolutionary processes. Discussion, 3 periods. Prerequisite: junior standing. (Variable)
840:144(g). Virology - 4 hrs.
Introduction to virus structure, replication, genetics, pathogenicity, host interactions, detection, epidemiology, evolution, and virology methods. Health, agriculture, research and industry applications. Discussion, 3 periods; lab, 2 periods. Prerequisites: 840:151; junior standing. (Variable)
840:146(g). Developmental Biology of Animals - 4 hrs.
Major concepts and central questions of animal development and controlling mechanisms. Laboratory emphasis on experimental inquiry and developmental anatomy. Discussion, 3 periods; lab, 2 periods. Prerequisites: 840:140; junior standing. (Offered Fall and Spring)

## 840:147. Cancer and Emerging Infectious Diseases - 3 hrs.

Cellular and molecular study of cancer, its epidemiology, standard and novel cancer treatments, examination of emerging and re-emerging infectious diseases, their causative organisms, and human immune responses to them. Discussion, 3 periods. Prerequisites: 840:051; 840:052; $860: 044$ and $860: 048$, or $860: 070$. (Offered Spring)

## 840:148(g). Human Genetics and Human Evolution - 3 hrs.

Genetics and evolution of humans, including human reproductive processes and technologies, single gene and polygenic human traits, genetic engineering, and human evolution, including a description and interpretation of fossil hominoids and behavioral and cultural evolution. Prerequisites: 840:052; junior standing. (Offered Summer)

## 840:149(g). Applied and Environmental Microbiology - 3 hrs.

Growth and metabolic diversity of microorganisms focusing on their practical applications for foods, pharmaceuticals, agriculture, and the solving of environmental problems. Discussion, 3 periods. Prerequisites: 840:151; junior standing. (Variable)
840:150 (g). Immunology - 4 hrs.
Focus on multiple levels of human immunity, from organs/cells to molecular events. Basic immunology and relationships between immunology and various disease states. Laboratory experiences include many commonly-used immunology techniques. Discussion, 3 periods; lab, 3 periods. Prerequisites: 840:140; junior standing. (Offered Fall)

## 840:151. General Microbiology - 4 hrs.

Physiology, morphology, taxonomy, immunology, and pathogenicity of microbes, with applications to medicine, agriculture, sanitation, and industry. Discussion, 2 periods; lab; 4 periods. Prerequisites: 840:051; 840:052; 860:044 and 860:048, or 860:070. (Offered Fall and Spring)

## 840:152. Microbial Molecular Genetics - 4 hrs.

Introduction to the study of microbial genetics and molecular biology. Laboratory emphasizes methods used to study bacteria inheritance patterns (conjugation, transduction, and transformation mapping) and modern molecular techniques of genetic analysis such as polymerase chain reaction and DNA sequencing. Discussion, 2 periods; lab, 4 peri-
ods. Prerequisites: $840: 051 ; 840: 052 ; 860: 044$ and $860: 048$, or $860: 070$. (Offered Fall)

## 840:153(g). Recombinant DNA Techniques - 4 hrs.

Study of techniques for manipulating and analyzing DNA, including genomic library construction, polymerase chain reaction, oligonucleotide synthesis, genomic analysis with computers, and DNA and RNA isolation. Discussion, 2 periods; lab, 4 periods. Prerequisites: 840:140; junior standing. Prerequisite or corequisite: 840:130. (Offered Spring)
840:154(g). Aquatic Ecology - 3 hrs.
Introduction to geological, physical, chemical, and biological factors that interact to determine functional characteristics of inland waters. Prerequisites: $840: 140$; junior standing. (Offered Fall)

## $840: 155(\mathrm{~g})$. Ecotoxicology - 4 hrs.

Detailed overview of ecological and toxicological aspects of environmental pollution emphasizing responses of populations, communities, and ecosystems to contaminants. Traditional biomonitoring and toxicity testing methods, state-of-the-art concepts and methodologies. Lecture/ discussion, 3 periods; lab, 3 periods. Prerequisites: 840:140; junior standing. (Offered odd Springs)

## 840:157(g). Biostatistics - 3 hrs .

Introduction to methods used to analyze and interpret numerical data from biological experiments. Emphasis on parametric statistics; use of SAS computer package for computations. Lecture, 2 hours; lab, 2 hours. Prerequisites: 800:046 or equivalent; 840:140; junior standing. (Offered Spring)
840:160. Field Zoology of Vertebrates - 4 hrs.
Identification and natural history of Iowa vertebrates. Emphasis on field trips. Discussion, 2 periods; lab and field work, 6 periods. Prerequisites: 840:051;840:052; 860:044 and 860:048, or 860:070. (Offered Spring) 840:162(g). Ornithology - 4 hrs.
Biology of birds, including systematics, behavior, and ecology. Lecture, 3 periods; lab and field, 3 periods. Prerequisites: 840:140; junior standing. (Offered odd Springs)

## $840: 164(\mathrm{~g})$. Mammalogy - 4 hrs.

Biology of mammals, including evolutionary history, zoogeography, ecology, and diversity. Laboratory emphasis on identifications, natural history, and field techniques. Lecture, 3 periods; lab and field, 3 periods. Prerequisites: 840:140; junior standing. (Offered Fall)
840:166(g). Plant Systematics - 4 hrs.
Classification and identification of vascular plants, with emphasis on evolution of species and larger groups. Discussion, 2 periods; lab and field work, 4 periods. Prerequisites: $840: 140$; junior standing or consent of department head. (Offered Fall)
840:167(g). Conservation Biology - 3 hrs.
Patterns of biological diversity, conservation ethics, extinction threats, island biogeography theory, population genetics of rare species, conservation in zoos, establishment and management of protected areas, and community-based conservation. Lecture/discussion, 3 periods; arranged field trip. Prerequisites: 840:140; junior standing. (Offered Fall)
840:168. Ecology - 3 hrs.
Relationship of organisms to their environment with emphasis on principles of population, community, and ecosystem structure and dynamics. Prerequisites: 840:051; 840:052; 860:044 and 860:048, or 860:070; or consent of instructor. (Offered Fall and Spring)
840:169. Ecology Laboratory - 1 hr .
Experiences in sampling, analyzing, evaluation, and contrast of numerical biotic and abiotic data; presentation of results in written reports. Lab, 3 periods. Prerequisite or corequisite: 840:168. (Offered Fall)
840:170. Entomology - 3 hrs.
Introduction to biology of insects. Discussion, 2 periods; lab, 2 periods. Prerequisites: 840:051; 840:052; 860:044 and 860:048, or 860:070. (Variable)

## 840:171. Plant-Animal Interactions - 3 hrs .

Integration of plant and animal ecology from an evolutionary perspective. Topics include co-evolution, ecological biochemistry, pollination biology, herbivore, ant-plant mutualism, seed dispersal by mammals, and carnivorous plants. Discussion, 3 periods. Prerequisites: 840:051; 840:052; 860:044 and 860:048, or 860:070. (Offered Spring)
840:172(g). Developmental Plant Anatomy - 4 hrs.
Structure and function of flowering plants, with emphasis on cell and organ development. Lecture, 2 periods; lab, 4 periods. Prerequisites: 840:140; junior standing. (Offered Fall)

## 840:173(g). Measuring Plant-Environmental Interactions - 3 hrs.

Theory and practice of measurements of interactions between environmental factors and plants. Two-thirds of the course involves using modern instrumentation to measure radiation quantity and quality; air temperature, humidity, and velocity; and soil moisture status. The last third will be devoted to plant water use and water status, and to photosynthetic gas exchange. Lecture, 2 periods; lab, 2 periods. Prerequisites: 840:103 or 840:154 or 840:168; 840:140; junior standing. (Variable)

## 840:174. Field Biology:

$\qquad$ $-1-3 \mathrm{hrs}$.
Selected topics in field biology, emphasizing hands-on techniques for field observation, and testing of evolutionary and ecological hypotheses. Offered both on- and off-campus in flexible format. Topics and hours listed in Schedule of Classes. May be repeated for credit on different topic. Prerequisites: vary with topic. (Variable)

## 840:178(g). Fire Management in Ecosystems - 3 hrs.

Study of fire, its relationship to organisms and other components of ecosystems, and implications for managément of ecosystems. Examination of prescribed burning as a management tool. Students will be trained in conducting prescribed burns and participate as burn crew members. Lecture/discussion, 2 periods; lab, 2 periods. Prerequisites: 840:140; junior standing. (Offered Spring)

## 840:179. Cooperative Education

A maximum of 3 graded hours of credit can be applied to a biology major as major elective credit. Up to 9 additional hours of ungraded credit (credit/no credit basis) may be taken as university electives. (Offered Fall, Spring, and Summer)

## 840:180(g). Restoration and Management of Natural Lands - 3 hrs .

Ecological principles applied to design, restoration, reconstruction, and management of natural areas, parks, and wildlands. Discussion, 2 periods; lab, 2 periods. Prerequisites: $840: 140$; junior standing. (Offered Fall)

## 840:181. Investigations in Life Science - 4 hrs.

Introduction to significant life science concepts and models of effective teaching related to elementary school life science. Topics include cellular structure and function, inheritance, plant systems, and human systems. Discussion and/or lab, 5 periods. Prerequisite: 820:032. (Offered Spring) 840:184(g). Natural History Interpretation Techniques - 4 hrs.
Development of effective techniques for relating natural history concepts and events to diverse audiences, with an emphasis on Iowa natural history. Lecture/discussion, 3 periods; lab, 2 periods. Prerequisites: 840:084; 840:168; junior standing. (Offered odd Springs)
840:185. Readings in Biology - 1-3 hrs.
Independent readings in biology from selected list approved in advance. Maximum of 3 hours for biology major or minor. Prerequisite: consent of department. (Offered Fall, Spring, and Summer)
840:189. Seminar - 1-2 hrs.
(Variable)

## 840:190. Undergraduate Research in Biology - 1-3 hrs.

Research activities under direct supervision of Biology faculty members. Credit determined prior to registration based upon student proposal with agreement of faculty advisor. May be repeated for maximum of 4 hours. Prerequisites: 9 hours of biology beyond 840:052; consent of department.
(Offered Fall, Spring, and Summer)
840:191. Senior Thesis - 1 hr .
Senior research thesis. Open only to and required for students pursuin. the B.S. Biology or B.A. Biology Honors Emphasis. Prerequisite; consent of department head. (Offered Fall, Spring, and Summer)
840:193(g). Current Curricula in the Life Sciences - 3 hrs .
Philosophy, methods, and materials of the life sciences for grades 7-12. Examination and evaluation of current curricular materials, curriculum development, and assessment strategies. Includes 15 hours of field experience in secondary school classrooms. Prerequisites: 820:190; juniow standing. (Offered Spring)

## 840:195. Internship/Field Experience - 1-10 hrs.

Supervised work experience in approved work situation. Offered on credit/no credit basis only. Prerequisite: consent of department. (Offered Fall, Spring, and Summer)
840.196. Natural History Interpretation Colloquium - 1 hr.

Upon completion of the rest of the requirements of the Natural History Interpretation minor, enrollees refine and present an exemplary component of the portfolio - an interpretive display or program. Completed portfolio also submitted for evaluation. Prerequisites: $430: 050$ or $430: 146$ or 43T:170; 840:180 or $990: 125 ; 840: 184$. Prerequisite or corequisite 840:179 or 870:195. (Variable)

## 840:197. Undergraduate Practicum in Biology Teaching - 1 hr.

Examination of teaching strategies and practical experience in laboratory teaching through observation and assistance in introductory biology laboratories. Offered on credit/no credit basis only. Prerequisite or corequisite: 840:193; consent of instructor. (Offered Fall and Spring)
840:198. Independent Study.
(Offered Fall, Spring, and Summer)
840:202. Graduate Colloquium - 1 hr.
Weekly presentation by a student, faculty member, or visitor on biological topic. Taken each semester for four semesters for maximum of 4 hours. Discussion, 1 period. (Offered Fall and Spring)

## 840:230. Special Problems in Biology - 1-6 hrs.

Credit determined at registration. (Problems in biology other than those for theses or in regular curricular offerings.) Prerequisite: 840:292 recommended; consent of department. (Offered Fall, Spring, and Summer) 840.240. Advanced Cellular and Molecular Biology - 3 hrs.

Selected topics concerning understanding of function of living organisms at molecular and cellular level: regulatory mechanisms, recombinant DNA techniques, gene expression, and genetics of diseases. Lecture/ discussion, 3 periods. May be repeated on different topic. Prerequisite: consent of instructor. (Offered even Falls)

## 840:250. Advanced Physiology and Development - 3 hrs.

Selected topics concerning understanding of organ, organ system, and organism structure and function: immune system, cellular signaling mechanisms, photosynthesis, and cell motility and development. Lecture/ discussion, 3 periods. May be repeated on different topic. Prerequisite: consent of instructor. (Offered odd Falls)
840:260. Advanced Ecology - 3 hrs.
Selected topics of ecology, concerning the understanding of relationships among organisms, and between organisms and their environments (natural or artificial): physiological ecology, conservation biology, and aquatic ecology. Lecture/discussion, 3 periods. May be repeated on different topic. Prerequisite: consent of instructor. (Offered even Springs)
840:270. Advanced Systematics and Evolutionary Biology - 3 hrs.
Selected topics concerning understanding of systematic and evolutionary relationships among organisms and evolutionary biology: evolutionary 'theory, systematics, and origin of life. Lecture/discussion, 3 periods. May be repeated on different topic. Prerequisite: consent of instructor. (Offered odd Springs)

## 840:289. Seminar - 1 hr.

(Variable)
840:292. Research Methods in Biology - 1 hr .
Introduction to research methods in biology. Emphasis on literature review, proposal preparation, and manuscript style. Discussion, 1 period. (Offered Fall)
840:297. Practicum.
(Variable)

## 840:299. Research

(Offered Fall, Spring, and Summer)

## 860 Chemistry

860:010. Principles of Chemistry - $3-4$ hrs.
Basic concepts of chemistry, the periodic table and its relation to atomic structure and chemical properties. How the understanding of changes in matter and energy is important in both living and non-living systems. Work of the chemist and the interactions of chemistry with other activities of humankind. Discussion, 3 periods; lab, 2 periods. May be taken without lab for 3 hours. No credit for student with credit in any college chemistry course. Prerequisite: student must have satisfied university entrance requirements-in English and Mathematics. (Offered Fall and Spring)

## 860:011. Molecules and Life - 3 hrs.

Basic concepts of chemistry, with an emphasis on the structure and function of molecules in living systems. Discussion, 3 periods. No credit for student with credit in any college chemistry course. Prerequisite: student must have satisfied university entrance requirements in English and Mathematics. (Offered Fall and Spring)

## 860:020. Chemical Technology - 4 hrs.

Basic concepts of inorganic and organic chemistry and their applications. to industrial processes. Emphasis on application of chemical principles in materials, energy production and use, and environmental problems. Discussion, 3 periods; lab, 2 periods. No credit for student with credit in any college chemistry course. (Variable)

## 860:030. Careers in Chemistry - 1 hr .

Presentations describing career opportunities and current areas of research in chemistry. Offered on credit/no credit basis only. No credit toward any major. Discussion, 1 period. (Offered Spring)

## 860:044. General Chemistry I - 4 hrs.

Structure of matter, its physical properties and laws describing them, the periodic table and its relation to atomic structure and chemical properties, and non-metallic elements and their compounds. Students with extensive background in high school chemistry and mathematics may enter 860:070 following departmental advisement. Discussion, 3 periods; lab, 3 periods. Prerequisite: student must have satisfied university entrance requirements in English and Mathematics. (Offered Fall, Spring, and Summer)

## 860:048. General Chemistry If - 4 hrs.

Continuation of $860: 044$ with emphasis on chemistry of non-metals, metals, chemical and ionic equilibrium, and separation and identification of ions. Discussion, 3 periods; lab, 3 periods. For pre-professional students and science majors with a special interest in chemistry. Prerequisite: 860:044 or equivalent. (Offered Fall, Spring, and Summer)
860:061. Applied General Chemistry - 4 hrs.
Basic concepts of chemistry, with particular attention to allied health and nutrition applications. Discussion, 3 periods; lab, 3 periods. No credit for students with credit in $860: 044$ or $860: 070$. (Offered Fall)
860:063. Applied Organic and Biochemistry - 4 hrs.
Basic concepts in organic chemistry and biochemistry, including nomenclature, functional groups, reactivity, and macromolecules. No credit for students with credit in 860:123. Discussion, 3 periods; lab, 3 periods. Pre-
requisite: 860:048 or 860:061 or 860:070. (Offered Fall and Spring)
860:070. General Chemistry I-II - 5 hrs.
Accelerated course for well-prepared students. Content similar to 860:044 and 860:048 but covered in one semester. Completion satisfies General Chemistry requirement of any chemistry major. Discussion, 4 periods; lab, 3 periods. Prerequisite: consent of department head. (Offered Fall)
860:110. Descriptive Inorganic Chemistry - 4 hrs.
Properties, structures, reactions, and applications of elements and their most important compounds. Discussion, 3 periods; lab, 3 periods. Prerequisite: $860: 048$ or $860: 070$. (Offered Fall and Spring)

## 860:120. Organic Chemistry I-3 hrs.

Fundamentals of organic chemistry. For majors in the sciences and those preparing for medically-related careers. Discussion, 3 periods. Prerequisite: 860:048 or 860:070. (Offered Fall, Spring, and Summer)
860:121. Organic Chemistry Laboratory - 2 hrs.
Purification and identification techniques and some representative organic reactions. Lab, 6 periods. Prerequisite or corequisite: 860:120. (Offered Fall and Spring)
860:123. Organic Chemistry II - 3 hrs .
Continuation of $860: 120$. Discussion, 3 periods. Prerequisite: 860:120. (Offered Fall, Spring, and Summer)

## 850:132. Quantitative Analysis - 4 hrs.

Theory, technique, and calculations of volumetric and gravimetric analysis. Statistical treatment of data. Classical analytical procedures supplemented by instrumental techniques. Discussion, 2 periods; lab, 6 periods. Prerequisite: 860:048 or 860:070. (Offered Fall and Spring)
860:136(g). Applied Instrumental Analysis - 4 hrs.
Applications of instrumental techniques to quantitative analysis, including principles and techniques of instrumentation in areas of chromatography, spectrophotometry, and electrochemistry. Discussion, 2 periods; lab, 6 periods. No credit toward majors requiring $860: 137$ and no credit for students with credit in $860: 137$. Prerequisites: $860: 063$ or $860: 120$; 860:132; junior standing. (Variable)

## 860:137(g). Instrumental Analysis - 4 hrs.

Application of physical chemical principles to theory and practice of instrumental methods of analysis such as spectrophotometric, electroanalytical, chromatographic, and computerized techniques. Discussion, 2 periods; lab, 6 periods. Prerequisites: $860: 120 ; 860: 132 ; 860: 140$; junior standing. Prerequisite or corequisite: 860:141. (Offered Fall and Spring)
$860: 138(\mathrm{~g})$. Environmental Chemistry - 3 hrs .
Study of sources, reactions, and transport of environmental pollutants in air and water. Lab includes analysis of specific chemical species in environmental samples. Discussion, 2 periods; lab, 3 periods. Prerequisites: 860:132; junior standing or consent of department head. (Variable)
860:140(g). Physical Chemistry: Thermodynamics - 3 hrs.
Application of laws of physics to energy changes in chemical processes and reactions. Discussion, 3 periods. Prerequisites: 800:061; 860:048 or 860:070; 880:056 or 880:131; junior standing. (Offered Fall)
860:141(g). Physical Chemistry: Kinetics, Quantum Mechanics, and Spectroscopy - 3 hrs.
Application of laws of physics to atomic and molecular structure and behavior. Discussion, 3 periods. Prerequisites: $800: 061 ; 860: 048$ or $860: 070$; 880:056 or 880:131; junior standing. (Offered Spring)

## 860:142(g). Principles of Physical Chemistry - 3 hrs.

Physical aspects of chemistry for needs of high school chemistry teacher, and for students in biological sciences. Discussion, 3 periods. Recommended: 880:054. Prerequisites: $800: 046 ; 860: 048$ or $860: 070$; junior standing or consent of department head. (Offered even Falls)
860:143(g). Physical Chemistry Laboratory - 1-3 hrs.
Physical measurement techniques in chemistry. Meets 3-9 hours per week. Two credit hours should be taken for the B.S. and B.A. Chemistry major programs; students should enroll concurrently with, or after, their
second semester of physical chemistry. Those with credit in 860:142 may take 1 hour. Prerequisites: $860: 132 ; 860: 140$ or $860: 141$ or $860: 142$; junior standing. (Offered Spring)
860:145(g). Inorganic Chemistry - 3 hrs.
Applications of principles of physical chemistry to inorganic systems, with emphasis on chemistry of transition elements. Discussion, 3 periods. Prerequisites: 860:110; 860:120; 860:141; junior standing. (Offered Fall) 860:149(g). Advanced Laboratory Techniques in Chemistry - 2 hrs.
Advanced techniques in synthesis, purification, and characterization of organic and inorganic compounds. Discussion, 2 periods; lab, 4 periods. Prerequisites: $860: 110 ; 860: 121$; junior standing. Prerequisites or corequisites: 860:123; 860:141. (Variable)

## $860: 154 \mathrm{~g}$ ). Biochemistry I - 4 hrs.

Structure and function of biologically-important molecules including amino acids, proteins, carbohydrates, lipids, and nucleic acids; intermediary metabolism; and enzyme kinetics. Lecture, 4 periods. Prerequisites: C- or higher in $860: 123$; junior standing. (Offered Fall and Spring) 860:155(g). Biochemistry II - 2 hrs.
Continuation of $860: 154$. Bioenergetics, photosynthesis, additional metabolic pathways, enzyme mechanisms, macromolecular biosynthesis, recombinant DNA, and current topics in biochemistry. Lecture, 2 periods. Prerequisites: 860:154; junior standing. (Offered Spring)

## 860:156(g). Biochemistry Laboratory - 2 hrs.

Introduction to biochemical methodology. Chromatographic and electrophoretic purifications of proteins, lipids, and nucleic acids; chemical characterizations of amino acids, peptides, carbohydrates, and fatty acids; study of enzyme kinetics. Lab, 6 periods. Prerequisite: junior standing. Prerequisite or corequisite: 860:154. (Offered Spring)
860:161(g). Organic Structure Analysis - 3 hrs.
Use of infrared and ultraviolet-visible spectroscopy, proton and carbon magnetic resonance, mass spectrometry, and other physical and chemical methods for assignment of structure to organic compounds. Discussion, 3 periods. Prerequisites: $860: 121 ; 860: 132$; junior standing; consent of department head. Credit applied to B.S. Chemistry major requires additional prerequisite of $860: 140$ or $860: 141$. (Offered odd Falls)

## 860:180. Undergraduate Research in Chemistry - 1-3 hrs.

May be repeated for maximum of 6 hours. Prerequisites: $860: 121 ; 860$ : 132; consent of department head. Credit applied to B.S. Chemistry major requires additional prerequisite of $860: 140$ or $860: 141$. (Offered Fall, Spring, and Summer)

## 860:210. Advanced Inorganic Chemistry - 3 hrs.

Coordination chemistry, organometallics, materials chemistry, or other advanced topics in inorganic chemistry. May be repeated on different topics with consent of instructor. Discussion, 3 periods. Prerequisite: $860: 145$ or consent of instructor. (Offered odd Springs)
850:220. Advanced Organic Chemistry - 3 hrs.
Product analysis, kinetics, and mechanism of organic reactions. May be repeated on different topics with consent of instructor. Discussion, 3 periods. Prerequisites: 860:123; 860:141; or consent of instructor, (Offered even Falls)

## 860:240. Special Problems in Chemistry - 1-6 hrs.

Credit determined at registration. Problems selected according to needs of students. Prerequisite: consent of department head. (Offered Fall and Spring)

## 860:241. Advanced Physical Chemistry - 3 hrs.

Molecular structure, chemical kinetics, quantum mechanics, or other advanced topics in physical chemistry. May be repeated on different topics with consent of instructor. Discussion, 3 periods. Prerequisites: $860: 140$; 860:141; or consent of instructor. (Offered odd Falls)

## 860:242. Advanced Analytical Chemistry - 3-4 hrs.

Chromatography, spectroscopy, electrochemistry, or other advanced topics in analytical chemistry. May be repeated on different topics with
consent of instructor. Discussion, 3 periods, if taken for 4 hours, lab 3 additional periods. Prerequisites: 860:137; 860:140; 860:141; or consent of instructor. (Offered even Springs)

## 860:289. Seminar - 1 hr.

Current topics in chemistry. May be repeated. (Offered Fall, Spring, and Summer)

## 860:292. Research Methods and Chemical Literature - 1-3 hrs.

Concepts and procedures for developing a chemical research problent use and importance of chemical literature. (Offered Fall, Spring, and Summer)
860:299. Research
(Offered Fall, Spring, and Summer)

## 870 Earth Science

## 870:010. Astronomy - 3-4 hrs.

Introduction to the Universe, solar system, stars, and galaxies, includiny apparent motions of bodies in the sky; development of astronomy and its impact on humankind. Prerequisite: student must have satisfied uni4 versity entrance requirements in English and Mathematics. (Offered Falld Spring, and Summer)

## 870:011. Astronomy Laboratory - 1 hr.

Fundamentals of astronomical observation, the use of introductor astronomical instruments, and application of charts and almanacs to finding one's way about the night sky. Prerequisite: consent of instructot Corequisite: 870:010. (Offered Fall, Spring, and Summer)

## 870:021. Elements of Weather - 3 hrs.

Meteorological elements and their applications to environment; inter pretation of weather maps and weather data; forecasting and briefinf on daily weather. Discussion, 3 periods. No credit for those who hav completed 870:121. Prerequisite: student must have satisfied universit entrance requirements in English and Mathematics. (Offered Fall, Sprin) and Summer)
870:022. Elements of Weather Laboratory - 1 hr .
Fundamentals of meteorological observation, use of basic meteorologic instruments, and applications of maps and charts to understanding forel casts. Intended for science teaching majors and minors. Lab, 2 period Prerequisite or corequisite: 870:021. (Offered Fall and Spring)
870:031. Physical Geology - 4 hrs.
Introduction to the physical environment, emphasizing materials of the Earth and processes that lead to changes within and on the Earth. Lab emphasis includes rocks and minerals, geologic processes, and landscap development. Discussion, 3 periods; lab, 2 periods. Prerequisite: studen? must have satisfied university entrance requirements in English and Mathematics. (Offered Fall and Spring)

## 870:035. Earth History - 4 hrs.

Methods and principles used in deciphering the 4.6 billion-year histor of our planet; discussion of history and evolution of life on Earth and examination of major physical and plate-tectonic events through geologic time. Discussion, 3 periods; lab, 2 periods. Prerequisite: 870:031 or equivalent. (Offered Fall and Spring)
870:037. Field Studies in $\qquad$ - 1-4 hrs.

Field studies in various areas of Earth Science: geology, oceanography, paleontology, meteorology, and astronomy. To be preceded by seminars on proposed study area. Student collection of data in the field and reports on their findings. May be repeated in different study area. Only 4 hours may be applied to the Earth Science minor. Prerequisite: consent of instructol (Offered Spring)
870:109(g). Fundamentals of Astronomy - 3 hrs.
Basic principles of astronomy intended primarily for teachers. No credily for students with credit in 870:010 or its equivalent. Prerequisites: one year of high school algebra or equivalent; junior standing; consent of
department head. (Offered Fall, Spring, and Summer)

## 870:11(g). Fundamentals of Weather - 3 hrs .

Basic principles of meteorology intended primarily for inservice teachers. Prerequisites: junior standing; consent of department head. (Offered Fall and Spring)

## 870:113(g). Topics in Earth Science - $\mathbf{1 - 3}$ hrs.

Offered both on- and off-campus in flexible format. May include plate tectonics, geomagnetism, naked-eye astronomy, telescope usage, weather forecasting, or other topics of current interest. Topics listed in Schedule of Classes. May be repeated on different topic. Application to major requires consent of department head. Prerequisite: junior standing. (Offered Fall, Spring, and Summer)
870:115(g). Volcanology - 3 hrs.
Origin, classification, eruptive mechanisms and hazards of volcanoes, and related phenomena. Discussion, 2 periods; lab, 2 periods. Prerequisites: 870:031 or equivalent; junior standing. (Offered odd Springs)

## 870:121(g). Meteorology - 4 hrs.

Topics of weather observation and prediction; physical basis of cloud formation; radiational heating and cooling; the Earth's energy budget; wind circulation; precipitation processes; storm systems; and maps and charts. Discussion, 3 periods; lab, 2 periods. Prerequisites: 860:044; 870:021; 880:054; junior standing. (Offered Fall)

## 870:122(g). Weather Analysis and Forecasting - 3 hrs.

Focus on middle latitude weather systems, principally those of the cold season. Topics include discussion of historical conceptions and models of extratropical cyclones, present understanding of these weather systems, and techniques of analysis and prediction. Important component is hands-on forecasting. Discussion/lab, 4 periods. Prerequisites: 870:121; junior standing. (Offered odd Springs)
870:123(g). Air Quality - 4 hrs.
Topics from atmospheric dynamics, atmospheric chemistry, physical meteorology, and micrometeorology; atmospheric transport processes in time and space; local and regional concentrations of pollutants; implications of air pollution control strategies; numerical modeling techniques with application to air quality issues; field studies and remote sensing of atmospheric transport. Discussion, 4 periods. Prerequisites: 800:060; 870:121; junior standing. (Offered even Springs)

## 870:125. Fossils and Evolution - 4 hrs.

Topics in paleontology, including fossil preservation, systematics, functional morphology, paleoecology, paleobiogeography, and biostratigraphy, with special emphasis on mass extinctions and the role of paleontology in reconstructing evolutionary history. Laboratory studies of major groups of fossil invertebrates. Discussion, 3 periods; lab, 3 periods. (Offered Spring)

## 870:128(g). Fundamentals of Geology - 4 hrs.

Basic principles of physical geology intended primarily for inservice teachers. Prerequisites: junior standing; consent of department head. (Offered Fall and Spring)

## 870:129(g). Structural Geology - 4 hrs.

Origins and mechanics of rock deformation. Plate tectonics and the deformation of Earth's crust. Field trip. Discussion, 2 periods; lab, 4 periods. Prerequisites: 870:031; 870:035; junior standing. (Offered even Springs)

## 870:130. Crystallography - 2 hrs.

Morphologic, structural, and x-ray crystallography. Laboratory exercises emphasize identification of unknown compounds, determination of space lattices, space groups, and cell parameters by x-ray diffraction. Discussion, 2 periods; lab, 6 periods (nine-week course). (Offered Fall)

## 870:131. Systematic Mineralogy - 2 hrs.

Crystal chemistry, determinative methods, and systematic description of naturally-occurring compounds with emphasis on rock-forming minerals. Laboratory exercises cover advanced determinative techniques. Discussion, 2 periods; lab, 6 periods (nine-week course). Prerequisites:

## 870:031; 870:130. (Offered Fall)

## 870:135. Optical Mineralogy-Petrography - 4 hrs.

Optical properties of minerals and use of the petrographic microscope. Introduction to petrography of igneous, metamorphic, and sedimentary rocks, with emphasis on identification of minerals in thin sections. Discussion, 2 periods; lab, 6 periods. Prerequisite: 870:131. (Offered Spring) 870:136(g). Stratigraphy and Sedimentation - 4 hrs.
Investigation of layered rocks, sedimentary processes, sedimentation, environments of deposition, correlation procedures, and classification and description of common sedimentary rocks. Field trips. Discussion, 2 periods; lab, 4 periods. Prerequisite: junior standing. Prerequisite or corequisite: 870:035. (Offered Fall)
870:137(g). Field Studies in $\qquad$ - 1-4 hrs.

Field studies in various areas of Earth Science including geology, oceanography, paleontology, meteorology, and astronomy. To be preceded by seminars on the proposed study area. Student collection of data in the field and reports on their findings. May be repeated in different study area. Only 4 hours may be applied to the Earth Science minor. Prerequisites: an 870:1xx course appropriate to the specific field studies and approved by department head; junior standing; consent of instructor. (Offered Spring)
870:141(g). Geomorphology - 3 hrs.
Classification, description, origin, and development of landforms and their relationship to underlying structure and lithology; emphasis on geomorphic processes. Includes fluvial, glacial, periglacial, eolian, karstic, weathering, and mass-movement processes and features. Discussion, 2 periods; labs and field trips, 2 periods. Prerequisites: 870:031 or 970:026; junior standing. (Offered Fall)

## 870:142(g). Igneous Petrology - 4 hrs.

Description, classification, and genesis of igneous rocks. Discussion, 2 periods; lab, 6 periods. Prerequisites: 800:060; 870:135; junior standing. (Offered odd Falls)

## 870:143(g). Geochemistry - 4 hrs.

Distribution of elements in the Earth and chemical laws governing those distributions. Discussion, 2 periods; lab, 6 periods. Prerequisites: 860:048 or 860:070; junior standing. (Offered even Falls)

## 870:151. Planets - 2 hrs.

Examination of the Sun's family of nine planets, attendant satellites, and interplanetary debris; processes at work in the Solar System; search for planets elsewhere in the Galaxy. Discussion, 2 periods. Prerequisites: 870: 010 or equivalent. (Offered Spring)

## 870:152. Stars - 2 hrs.

Study of structure and the evolution of stars; the Sun, protostars, red giants, white dwarfs, variable stars, supernovae, pulsars, and black holes. Discussion, 2 periods. Prerequisite: 870:010 or equivalent. (Offered odd Springs)

## 870:153. Galaxies and Cosmology -2 hrs

Study of the Milky Way Galaxy and other galaxies. Examination of active galaxies and radio galaxies, quasars, and galactic black holes. Discussion of the structure, origin, and fate of the Universe. Discussion, 2 periods. Prerequisite: 870:010 or equivalent. (Offered even Springs)

## 870:154(g). Observational Astronomy - 2 hrs.

Use of astronomical instruments, (telescopes, cameras, and spectroscopes), along with observing aids, (charts, catalogs, and ephemerides), for collection, analysis, and interpretation of astronomical data. Prerequisites: 870:010 ( 4 semester hours) or equivalent; junior standing. (Offered Fall)

## 870:160(g). Geology of lowa - 2 hrs.

Iowa's geologic history Precambrian to present. Rock record, changes in environments of deposition, fossil record, and occurrence and origin of important economic mineral resources. Pleistocene (Ice Age) history. Discussion, 2 periods. Prerequisite: junior standing. (Variable)

## 870:165 (g). Oceanography -3 hrs.

Basic principles of geological, biological, chemical, and physical oceanography; emphasis on marine geology. Physiographic features of ocean basins, coastal features and processes, oceanic sediments, biological and geological resources, and ocean management. Discussion, 3 periods. Prerequisites: 870:031 or equivalent; junior standing. (Offered even Springs)
870:171(g). Environmental Geology - 3 hrs.
Emphasis on geology's relation to social, economic, and political realms through team preparation of simulated environmental-impact statements or planning documents. Analysis of issues or problems of local concern where possible. Discussion, 3 periods. Prerequisites: 870:031 or equivalent; junior standing. (Offered odd Falls)

## 870:173(g). Environmental Hydrology - 3 hrs.

Introduction to environmental aspects of watershed hydrology. Surface water hydrologic processes, pollution of surface water resources, surface water - ground water interactions, unsaturated zone hydrologic processes, movement of chemicals in soils, site characterization, and soil remediation techniques. Discussion, 3 periods. Prerequisites: 800:060; 870:031; junior standing. (Offered even Springs)

## 870:175(g). Hydrogeology - 3 hrs.

Principles and applications of hydrogeology including study of runoff, stream flow, soil moisture, and ground water flow. Examination and analysis of ground water flow to wells, regional ground water flow, geology of ground water occurrence, water chemistry of ground water, water quality and ground water contamination, ground water development and management, field methods, and ground water models. Discussion, 3 periods. Prerequisites: 800:060; 870:031; junior standing. (Offered odd Springs)

## 870:180. Undergraduate Research in Earth Science - 1-3 hrs.

Research activities under direct supervision of Earth Science faculty member. Credit to be determined at registration. May be repeated for maximum of 6 hours. Prerequisites: consent of instructor and department head. (Offered Fall, Spring, and Summer)

## 870:181. Investigations in Earth Science - 4 hrs.

Introduction to significant concepts and theories of earth science and a model of effective teaching strategies related to elementary school level. Topics include geologic materials and processes acting on them and fundamentals of earth history, weather, and astronomy. Discussion and/or lab, 5 periods plus arranged. Prerequisite: 820:031. (Offered Spring)
870:189(g). Readings in Earth Science - 1-3 hrs.
Maximum of 3 hours may be applied to earth science or geology majors or minors. Prerequisites: junior standing; consent of instructor and department head. (Variable)

## 870:191. Undergraduate Practicum - 1-2 hrs.

Practical experience in teaching; participation in laboratory and instructional assistance under direct supervision of staff member. May be repeated for maximum of 4 hours. Prerequisites: junior or senior standing; consent of instructor and department head. (Offered Fall and Spring) 870:195. Internship - 1-6 hrs.
Supervised work experience in approved work situation. Offered on credit/no credit basis only. Prerequisite: consent of department head. (Offered Fall, Spring, and Summer)

## 870:292. Research Methods in Earth Science - 3 hrs.

Methods and evaluation of research in the earth sciences. Individual exploration of possible research or thesis project. Discussion, 3 periods. (Variable)
870:297. Practicum.
(Variable)
870:299. Research.
(Variable)

## 880 Physics

880:011. Conceptual Physics - 4 hrs.
Energy; temperature and heat; waves and sound; electricity and magne tism; light and color; and atomic and nuclear structure of matter. Em; phasis on observation, interpretation, and conceptual understandinisi of physical phenomena. Discussion, 3 periods; lab, 2 periods. Students may not earn credit in both 880:011 and 880:012. Prerequisite: student must have satisfied university entrance requirements in English and Math, ematics. (Offered Fall and Spring)
880:012. Physics in Everyday Life - 3 hrs.
Basic laws and concepts of physics introduced and demonstrated througl operation of everyday devices and systems. Emphasis on understandiry physical principles behind working of módern technologies and interple between science and technology. Students may not earn credit in both $880: 011$ and 880:012. Prerequisite: student must have satisfied universit entrance requirements in English and Mathematics. (Offered Fall and Spring)

## 880:040. Elementary Holography - 1 hr .

Students make and view holograms with light from laser. Suitable for stuy dents with little or no background in physics. Presents elementary theort of holograms and laser light; emphasis on readily-applied information and techniques. May not apply toward a physics major. Half-semested course. Discussion, 1 period; lab, 2 periods. (Variable)

## 880:054. General Physics I-4 hrs.

Algebra-based introductory course covering Newtonian mechanic gravitation, and thermal physics. Emphasis on conceptual understand ing of physical principles through group investigations and lab activitie Discussion/lab, 5 periods. Prerequisite: high school algebra and trigol nometry or equivalent. (Offered Fall and Spring)

## 880:056. General Physics II - 4 hrs.

Algebra-based introductory course covering electricity, magnetisn optics, and modern physics. Emphasis on conceptual understandin of physical principles through group investigations and lab activities Discussion/lab, 5 periods. Prerequisite: 880:054 or 880:130. (Offered Fall and Spring)
880:120(g). Elementary Atomic and Nuclear Physics - 4 hrs.
Atomic and nuclear structure; elementary particles; radioactivity; waver particle duality; and interactions and detection of radiation. Lower math ematical level than 880:137. Discussion, 3 periods; lab, 2 periods. Canno( apply toward an undergraduate or graduate physics major. Prerequisite 880:056; junior standing. (Offered even Springs)
880:130. Physics I for Science and Engineering - 4 hrs.
Calculus-based introductory course covering Newtonian mechaniced gravitation, and thermal physics. Lab activities. Discussion/lab, 5 periodsf Prerequisite: one year of high school physics or equivalent. Prerequisite or corequisite: 800:060. (Offered Fall)

## 880:131. Physics H for Science and Engineering - 4 hrs.

Calculus-based introductory course covering electricity, magnetism, and optics. Lab activities. Discussion/lab, 5 periods. Prerequisites: 880:054 with a minimum grade of $B$ or $880: 130$. Prerequisite or corequisite, 800:061. (Offered Spring)

## 880:132. Physics III: Theory and Simulation - 3 hrs.

Calculus-based course covering the more advanced topics in introduce tory physics. Emphasis on developing analytical and computational skills needed to study physics at a more advanced level. Topics include Newtoy nian mechanics and applications, Maxwell's equations and applicationsy Prerequisite: 880:131. (Offered Fall)

## $880: 134(\mathrm{~g})$. Environmental Applications of Physics - 3 hrs .

Quantitative analysis of variety of specific, realistic problems in environ mental science. Principles of physics and some results from chemistry will be applied to construction of mathematical models in high-leve,
computational environment with emphasis on systems thinking, box models, and flows. Prerequisites: 800:061; 860:048 or 860:070; 880:056 or 880:131; junior standing. (Offered even Falls)

## 880:136(g). Thermodynamics and Statistical Mechanics - 4 hrs.

General principles of classical thermodynamics and applications (e.g., to first-order phase transitions); general principles of statistical mechanics and application (e.g., to the classical ideal gas). Prerequisites: 800:062; 880:132; 880:137; junior standing. (Offered even Falls)
880:137(g). Modern Physics - 4 hrs.
Special relativity; quantum phenomena; wave-particle duality; atomic and nuclear structure; properties of solids, interaction of radiation with matter; and elementary particles. Prerequisites: 880:131; junior standing. (Offered Spring)

## $880: 138(\mathrm{~g})$. Modern Physics Laboratory 一 2 hr .

Experiments on interactions of photons and electrons; mass and charge of electrons; atomic spectroscopy; nuclear detection and spectroscopy; spin resonance; and properties of solids. Requires detailed lab reports, including error analysis. Prerequisite: junior standing. Prerequisite or corequisite: 880:137. (Offered Spring)
880:139(g). Elementary Particle Physics - 3 hrs.
Historical survey and basic concepts; elementary particle dynamics; relativistic kinematics; symmetries and conservation laws; Feynman rules; quantum electrodynamics; and weak interactions. Prerequisites: 880:137; junior standing. (Variable)

## 880:140(g). Modem Optics: Holography and Imaging - 3 hrs.

Holography is used as vehicle for learning modern optical techniques and for understanding basic wave interference properties of light. Topics include 3-D image formation; mirror, lens, and hologram ray tracing; holographic gratings and mirrors; holographic interferometry and color holography. Discussion, 2 periods; lab, 2 periods. Prerequisites: 880:056 or 880:131; junior standing or consent of department head. (Offered Fall)

## 880:141(g). Modern Optics: Lasers - 3 hrs.

Laser principles, output characteristics and safe operating practices; industrial, medical and scientific applications. Discussion, 2 periods; lab, 2 periods. Prerequisites: 880:056 or 880:131; junior standing or consent of department head. (Offered Spring)

## 880:142(g). Musical Acoustics - 3 hrs.

Fundamental acoustic phenomena and their implications for musical performance and instrument design. Waves; auditory mechanisms; tuning and temperaments; instrument resonances and adjustment; nonlinear mechanisms of sound production; human voice, radiation of sound; and sound in rooms. Discussion, 2 periods; lab, 2 periods. Prerequisites: Physical Science and Life Science requirements of Category 3 in the Liberal Arts Core; 580:012 or equivalent; junior standing or consent of department head. (Offered odd Springs)

## 880:145(g). Vibrations and Sound - 3 hrs.

Laboratory-centered course of fundamental and applied experiments related to vibrations; analysis and synthesis of vibrations and sounds; transmission, reflection, refraction, attenuation, and dispersion of sound waves; resonance, interference, and diffraction phenomena; and noise measurement and attenuation. Includes Fourier analysis. Discussion, 2 periods; lab, 2 periods. Prerequisites: 880:132; junior standing. (Offered even Springs)

## 880:150 (g). Computational Physics - 3 hrs .

Computer simulations and numerical solutions of behaviors of important physical systems, emphasizing those that are very difficult or impossible to analyze by traditional means, for example, nonlinear oscillators or phase transitions in the Ising Model. Prerequisites: 800:149; 880:132; 880:137; junior standing. (Offered odd Falls)
880:152(g). Electronics I - 4 hrs.
Basic DC and AC circuits; electrical measurements; power supplies; tran-
sistor circuits; operational amplifier circuits. Discussion, 2 periods; lab, 4 periods. Prerequisites: 880:056 or 880:131; junior standing or consent of department head. (Offered Fall)

## 880:154(g). Electronics II-4 hrs.

Programmable analog switching; operational amplifier applications; digital logic gates; digital counters and registers; analog-digital conversions; analog and digital data acquisition systems. Discussion, 2 periods; lab, 4 periods. Prerequisites: 880:152 or equivalent; junior standing. (Offered odd Springs)

## 880:157(g). Fundamentals of Physics I - 4 hrs.

Algebra-based introductory course covering Newtonian mechanics, gravitation, and thermal physics. Emphasis on conceptual understanding of physical principles through group investigations and lab activities. Enrollment limited to graduate students other than physics majors; students with credit in 880:054 or equivalent may not take this course for credit. Discussion/lab, 5 periods. Prerequisites: high school algebra and trigonometry or equivalent; junior standing; consent of department head. (Offered Fall and Spring)

## 880:158(g). Fundamentals of Physics II - 4 hrs.

Algebra-based introductory course covering electricity, magnetism, optics, and modern physics. Emphasis on conceptual understanding of physical principles through group investigations and lab activities. Enrollment limited to graduate students other than physics majors; students with credit in $880: 056$ or equivalent may not take this course for credit. Prerequisites: 880:157; junior standing; consent of department head. (Offered Fall and Spring)

## 880:166(g). Classical Mechanics - 4 hrs.

Vectors and kinematics; force and motion; work and energy; Lagrange's equations; gravity; oscillations; rigid-body motion; and accelerated reference frames. Prerequisites: 800:061; 880:132; junior standing. (Offered odd Falls)

## 889:167(g). Electrodynamics - 4 hrs.

Vector calculus. Electrostatic fields and dielectrics; magnetic fields, magnetic forces, and magnetic materials; Maxwell's equations and electromagnetic waves. Prerequisites: 880:132; junior standing. (Offered odd Springs)

## 880:172(g). Quantum Mechanics - 4 hrs.

Solution of Schrodinger equation for several systems: spin and angular momentum; identical particles; perturbation theory; WKB approximation; and scattering. Prerequisites: $800: 149 ; 880: 137 ; 880: 166$ or consent of instructor; junior standing. (Offered even Springs)
880:174(g). Applied Quantum Physics - 4 hrs.
Hydrogen atom; spin and angular momentum; multielectron atoms; quantum statistics; molecules; solids; band theory, semiconductors, and superconductors. Discussion, 3 periods; lab, 2 periods. Prerequisites: 880:137; 880:138; junior standing. (Offered even Falls)

## 880:179. Cooperative Education.

Applied physics internship under $\mathbf{8 8 0}: 179$ should be taken during the junior or senior year. If unable to do so, the internship may be done under 880:184 with consent of department. Successful completion of either 880:179 or 880:184 requires both a written and an oral report. Offered on credit/no credit basis only. (Offered Fall and Spring)

## 880:180. Undergraduate Research in Physics - 1-6 hrs.

Research activities under direct supervision of sponsoring staff members or at a national laboratory. Should normally be taken during senior year. Successful completion of the research experience requires both a written and oral report. Prerequisites: minimum overall 2.50 GPA ; consent of department. (Offered Fall and Spring)

## 880:184. Internship in Applied Physics - 1-3 hrs.

Departmentally approved work in applied physics (at an industrial, medical, or government laboratory) followed by oral and written reports given on completed work. Offered on credit/no credit basis only. Prerequisites:
minimum overall 2.50 GPA ; consent of department. (Offered Fall and Spring)

## 880:185(g). Laboratory Projects - $\mathbf{1 . 3}$ hrs.

Experimental activities to meet individual needs and interests not normally included in other courses. Maximum of 3 hours may be applied to a physics major or minor. Prerequisites: junior standing; consent of department. (Offered Fall and Spring)
880:187. Physics Seminar - 1 hr.
Participation in at least 12 physics colloquia; oral report on research topic or internship. Prerequisite: junior standing. (Offered Fall and Spring)
880:189(g). Readings in Physics - 1-3 hrs.
Readings/problems in areas of physics (or related interdisciplinary areas) not normally covered in other courses. Maximum of 3 hours may be applied to a physics major or minor. Prerequisites: junior standing; consent of department. (Variable)
880:190(g). Topics in Theoretical Physics - 2-4 hrs.
Tutorial course for students who wish to pursue graduate study in physics. Topics may include variational principles in mechanics, tensor representation of rigid-body rotations, boundary-value problems in electrostatics, and solution of the wave equation in electrodynamics. Prerequisites: 800: 149; 880:166; 880:167; senior standing in B.S. Physics major; consent of department. (Variable)

## 880:250. Special Problems in Physics - 1-6 hrs.

Credit determined at registration. Problems selected according to needs of students. Prerequisite: consent of department. (Variable)
880:299. Research.
(Variable)

## 890 Iowa Lakeside Laboratory

Iowa Lakeside Laboratory is a field station located in the lowa Great Lakes region of northwest lowa. It is run cooperatively by the three Regents' Universities. Each summer Iowa Lakeside Laboratory offers a variety of handson courses in many disciplines (archaeology, art, biology, ecology, environmental science, hydrology, evolution, geology, soils, taxonomy). Both undergraduate and graduate courses are offered. For information about courses being offered this summer and registration/housing forms, see the current Iowa Lakeside Laboratory Bulletin. This bulletin can be obtained from the UNI Department of Biology after mid-January or from Iowa Lakeside Laboratory ( 131 Bessey Hall, Iowa State University, Ames, IA 50011 -1020 Phone: (515) 294-2488. E-mail: lakeside@iastate.edu). The complete bulletin is also available on the World Wide Web. The URL is www.lakesidelab.org. Early registration is advisable because enrollment is limited to only 8-10 students in most courses.
890:015. Introduction to the Life Sciences - 1 hr .
Overview of the various disciplines (developmental biology, ecology, evolution, molecular biology, etc.) that collectively are the life sciences. Each section provides an opportunity to get hands-on experience with one or more of these disciplines. For high school students who have completed a course in biology. (Offered Summer)
A. Ecology and Evolutionary Biology
B. Molecular, Cellular and Developmental Biology

890:031. Ecology - 4 hrs.
Introduction to the principles of ecology at the population, community, and ecosystem level. Field studies of local lakes, wetlands, and prairies are used to examine factors controlling distributions, interactions, and roles of plants and animals in native ecosystems. (Offered Summer)
890:035. Physical Geology - 4 hrs.
Landscape development as a product of geologic materials and processes. Emphasis on field studies of composition of the earth, glaciation, weathering, erosion, and sedimentation. (Variable)

## 890:040. Archaeology - 4 hrs.

Nature of cultural and environmental evidence in archaeology and how
they are used to model past human behavior and land use; emphasiz on Iowa prehistory; basic reconnaissance surveying and excavation tech ${ }_{\text {d }}$ niques. (Offered Summer)
890:043. Illustrating Nature - Sketching - 2 hrs.
Sketching plants, animals, and terrain. Visual communication, develo ment of a personal style, and integration of typographic and visual el ments on a page will be emphasized. (Offered Summer)
890:044. Illustrating Nature - Photography - 2 hrs.
Beginning to intermediate technical and compositional aspects of colo photography of natural areas and their plants and animals. (Offene] Summer)

## 890:050. Undergraduate Internships - 1-5 hrs.

Placement with county conservation boards, camps, parks, etc., for expe rience as interpreters, rangers, and technicians. Prerequisite: sophomo standing; consent of instructor. (Offered Summer)

## 890:064. Biology of Aquatic Plants - 4 hrs.

Field-oriented introduction to the taxonomy and ecology of aquatic plane in lakes, wetlands, and rivers. Individual or group projects. (Offered Sum: mer)

## 890:100(g). Techniques for Biology Teaching - $1-2$ hrs.

Development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community colle. biology and environmental courses. Exercises will be built around comy mon organisms and ecosystems in Iowa. Field trips. Prerequisite: junic standing. (Offered Summer)
A. Animal Biology
B. Plant Biology
C. Fungi and Lichens
D. Aquatic Ecology
E. Prairie Ecology
F. Wetland Ecology
G. Limnology
H. Animal Behavior
I. Insect Ecology
J. Biology of Invertebrates
K. Non-invasive Use of Living Organisms
L. Leopold Education Project
W. Project WET

890:101. lowe Natural History - 4 hrs.
Biological diversity and its causes examined through lectures and fiel trips to native lake, marsh, forest, and prairie habitats. Topics includ measuring the environment, sampling and identifying organisms, experimenting with the ecosystem, understanding species interactions, and appreciating influences of past and present climates and geological evene on natural ecosystems of the region. Prerequisite: one course in the bio logical sciences. (Variable)

## 890:102 (g). Plant-Animal Interactions - 4 hrs.

Introduction to ecology and co-evolution of plants and animals. Emphat sis on dispersal, pollination, and plant-herbivore interactions; field and laboratory work, reading, and discussion. Prerequisite: one course in thd biological sciences; junior standing. (Variable)

## 890:103(g). Aquatic Ecology - 4 hrs.

Analysis of aquatic ecosystems. Emphasis on basic ecological principle ecological theories tested in the field, and identification of commo plants and animals. Prerequisite: courses in ecology, chemistry, and phy, ics; junior standing. (Offered Summer)

## 890:105(g). Plant Taxonomy - 4 hrs.

Principles of classification and evolution of vascular plants; taxonomi tools and collection techniques; use of keys. Field and laboratory studi emphasizing identification of local flowering plants and recognition of major plant families. Prerequisite: junior standing. (Offered Summer)

## $890: 107(\mathrm{~g})$. Field Parasitology — 4 hrs.

Ecology and life history of parasites, protozoans, helminths, arthropods; field and laboratory investigations including preparation, identification, and morphology of representative types and stages; general and comparative concepts of parasitology. Prerequisite: junior standing. (Variable)
890:109(g). Freshwater Algae - 4 hrs.
Structure and taxonomy of freshwater algae based on field-collected material. Emphasis on genus-level identifications, habitats; visited include lakes, fens, streams, and rivers; algal ecology. Prerequisite: junior standing. (Offered Summer)
890:119(g). Evolution - 4 hrs.
Mechanisms and patterns in microevolution and macroevolution. Field exercises emphasize studies of natural selection, adaptation, genetic variation, and population genetics of local plant and animal populations. Prerequisite: junior standing. (Variable)
890:121 (g). Plant Ecology - 4 hrs.
Principles of plant population, community, and ecosystem ecology itlustrated through studies of native vegetation in local prairies, wetlands, and forests. Group or individual projects. Prerequisite: junior standing. (Offered Summer)

## 890:122(g). Prairie Ecology - 4 hrs.

Basic patterns and underlying physical and biotic causes of both regional and local distributions of plants and animals of North American prairies; field and laboratory analyses and projects. Prerequisite: familiarity with basic principles in biological sciences and ecology; junior standing. (Offered Summer)

## 890:124(g). Wetland Ecology - 4 hrs.

Ecology, classification, creation, restoration, and management of wetlands. Field studies examine the composition, structure, and functions of local natural wetlands and restored prairie pothole wetlands. Individual or group projects. Prerequisite: junior standing. (Offered Summer)

## 890:120(g). Omithology - 4 hrs.

The biology, ecology, and behavior of birds with emphasis on field studies of local avifauna. Group projects stress techniques of population analysis and methodology for population studies. Prerequisite: junior standing. (Offered Summer)

## 890:127(g). Introduction to Insect Ecology - 4 hrs.

Field and laboratory study of insects, their diversity, and life history. Emphasis on ecology and behavior. Prerequisite: junior standing. (Variable) 890:128(g). Fish Ecology — 4 hrs.
Basic principles of fish interaction with the biotic and abiotic environment. Field methods, taxonomy, and biology of fish with emphasis on the fish fauna of northwestern Iowa. Prerequisite: junior standing. (Offered Summer)

## 890:129(g). Vertebrate Ecology and Evolution - 4 hrs.

Field and laboratory study of representative vertebrates of northwestern lowa. Observations and experimentation emphasize ecological histories by integrating concepts of functional morphology, behavioral ecology, and evolutionary biology. Prerequisite: junior standing. (Variable)
890:130(g). Natural History Workshop - 1-2 hrs.
Offered as demand warrants. Five day-long, non-technical introductions to a specific aspect of the natural history of the upper Midwest or techniques for studying natural history, Prerequisite: junior standing. (Variable)
A. Amphibians and Reptiles
B. Birds and Birding
C. Nature Photography
D. Mushrooms and Other Fungi
E. Iowa's Trees and Forests
F. Fish Biology
G. Prairies
I. Common Insects
J. Aquatic Plants
K. Life in Rivers
L. Life in Lakes
M. Mosses and Liverworts
N. Natural History of Iowa Great Lakes Region
P. Field Archaeology
Q. Common Algae
S. Scuba Diving
U. Sketching Nature

890:131. Flora of the lowa Great Lakes Region - 2 hrs.
(Variable)
890:142(g). Watershed Hydrology and Surficial Processes - 4 hrs.
Effects of geomorphology, soils, and land use on transport of water and materials (nutrients and contaminants) in watersheds. Fieldwork will emphasize investigations of the Iowa Great Lakes watershed. Prerequisites: four courses in the physical or biological sciences or engineering; junior standing. (Offered Summer)

## $\mathbf{8 5 0}: 144(\mathrm{~g})$. Ecosystems of North America - 2-4 hrs.

Extended field trip to study a particular type of ecosystem (prairie, coastal wetland, forest, alpine, coral reefs, etc.) or the ecosystems of a specific region (Rocky Mountains, Gulf Coast, Appalachian Mountains, Deserts of the Southwest, Central America, etc.). Prior to the field trip, there will be an orientation period and after each field trip a review and synthesis period. A field trip fee will be assessed to cover travel expenses. Prerequisite: general ecology course and consent of instructor; junior standing. (Offered Summer)

## 890:145 (g). Introduction to Environmental Planning - 4 hrs.

Introduction to environmental planning theories and methods, emphasis on environmental planning using GIS modeling approaches and public participation in the planning process. Students should have basic familiarity with ArcView and database programs. Individual or group environmental planning projects. Prerequisite: junior standing. (Offered Summer)
890:150(g). Watershed Modeling and GIS - 4 hrs.
GIS techniques for watershed hydrology and water quality modeling and water resource management, including various approaches to watershed analysis, modeling and management; analytical tools for modeling watershed hydrology and water quality; and case studies in modeling and managing rural and urban watersheds. Prerequisite: junior standing. (Offered Summer)
$890: 155(\mathrm{~g})$. Freshwater Invertebrates - 4 hrs.
Field-oriented introduction to the identification, life history, and ecology of common, free-living freshwater invertebrates of north-temperate lakes, rivers, and wetlands. Emphasis on the role of invertebrates in aquatic food chains and litter processing. Prerequisite: one or more ecology courses; junior standing. (Variable)
890:156(g). Advanced Field Ornithology - 2 hrs.
Field study of birds of the upper Midwest; extended field trip to Minnesota and Wisconsin; individual or group project. Field trip fee. Prerequisite: junior standing. Concurrent registration in 890:126g. (Variable)

## $890: 160(\mathrm{~g})$. Restoration Ecology - 4 hrs.

Ecological principles for the restoration of native ecosystems; establishment (site preparation, selection of seed mixes, and planting techniques) and management (fire, mowing, and weed control) of native vegetation; evaluation of restorations. Emphasis on the restoration of prairie and wetland vegetation. Prerequisite: a course in ecology; junior standing. (Offered Summer)

## 890:161(g). Introduction to GIS - 4 hrs.

Descriptive and predictive GIS modeling techniques, spatial statistics, and map algebra. Application of GIS modeling techniques to environmental planning and resource management. Prerequisite: junior standing. (Offered Summer)

## 890:165(g). Behavioral Ecology - 4 hrs.

Animal coloniality, courtship, territoriality, predator defense, habitat selection, foraging, mating systems, and parental care will be examined in the field in order to evaluate various ecological and evolutionary theories of animal behavior. Prerequisite: two courses in the biological sciences; junior standing. (Offered Summer)

## 890:166(g). Amphibians and Reptiles - 4 hrs.

Ecology, behavior, and conservation biology of amphibians and reptiles. Emphasis on their anatomy and morphology, temperature and water regulation, locomotion, life history, reproduction, population and community ecology, and conservation. Prerequisite: two courses in the biological sciences; junior standing. (Offered Summer)

## 890:170(g). Vegetation Restoration and Management - 4 hrs.

Theoretical and practical considerations for the development and implementation of vegetation management plans. Hands-on experience with a variety of techniques for restoring and managing natural vegetation, including mowing, burning, grazing, thinning, mechanical and chemical weeding, and planting techniques. Prerequisite: general ecology course; junior standing. (Offered Summer)
890:175(g). Soil Genesis and Landscape Relationships - 4 hrs.
Relationships between soil formation, geomorphology, and environment. Soil description, classification, geography, mapping, and interpretation for land use. Prerequisite: junior standing. (Offered Summer)
890:193. Undergraduate Research - 1-4 hrs.
Prerequisite: junior or senior standing; consent of instructor. (Variable) 850:198. Undergraduate Independent Study - 1-4 hrs.
Prerequisite: junior or senior standing; consent of instructor. (Variable) 890:215. Field Mycology - 4 hrs.
Identification and classification of the common fungi; techniques for identification, preservation, and culture practiced with members of the various fungi groups. (Offered Summer)
890:217. Ecology and Systematics of Diatoms - 4 hrs.
Field and laboratory study of freshwater diatoms; techniques in collection, preparation, and identification of diatom samples; study of environmental factors affecting growth, distribution, and taxonomic characters; project design and execution, including construction of reference and voucher collections and data organization and analysis. (Offered Summer)

## 890:240. Natural History Workshop - 1-3 hrs.

Offered as demand warrants. Graduate workshop on some aspect of the natural history of the Upper Midwest or on techniques for studying natural history. Prerequisite: consent of instructor. (Variable)

## 890:241. Statistical Methods for Field Biologists - 4 hrs.

Introduction to the design and implementation of ecological and environmental field studies and statistical analyses, interpretation, and presentation of field data. Fundamentals of experimental design, hypotheses testing with continuous and discrete data; simple and multilinear regression and correlation; introduction of analysis of variance; and data presentation. Individual and/or group projects will be used to collect field data. (Offered Summer)

## 890:263. Conservation Biology - 4 hrs.

Population- and community-level examination of factors influencing the viability of plant and animal populations from both demographic and genetic perspectives; assessment of biodiversity; and design and management of preserves. Prerequisite: 890:031. (Offered Summer)
890:286. Studies in $\qquad$ - 1-4 hrs.

Prerequisite: graduate standing and consent of instructor. (Variable)
890:291. Graduate Internships - 1-5 hrs.
Placement with county conservation boards, camps, parks, schools, etc., for experience as interpreters, rangers, technicians, and teachers. Prerequisite: consent of instructor. (Variable)

## 850:299. Research - 1-4 hrs.

Prerequisite: consent of instructor. (Variable)

## 900 Social Science

## 900:020. Women, Men, and Society - 3 hrs.

Examination of key issues of gender. Attention to variety of topics includy ing ethical issues and gender roles, gender-role stereotyping, male and female roles, sexuality, gender roles in non-western and minority culture and gender roles in United States institutions (e.g., in the nuclear family religion, and the work place). (Offered Fall and Spring)
900:023. American Civilization - 3 hrs.
Interdisciplinary study of American civilization as a developing societs culture, and nation over four centuries. Through an integration of history, literature and the arts, major themes, and their interrelationship within the American experience will be identified and analyzed. Liberal Arts Core credit for all students. (Variable)
900:041. Social Welfare: A World View - 3 hrs.
Comparative study of social welfare (social insurance, public welfar charity and philanthropy, social services, and mutual aid) in the United States, and selected nations from five regions of the world as defined by the International Congress of Schools of Social Work (African, Asiar) European, Latin American, and North American regions). (Same as 450:041) (Offered Fall and Spring)
900:045. American Racial and Ethnic Minorities - 3 hrs.
Survey of several American minorities, including Hispanics, Black Asians, and Native Americans. Multi-disciplinary study of these group, with particular emphasis on geographic origins, linguistic traditions, and current modes of economic subsistence. Introduction to folkways and mores of each group. (Same as 450:045 and 980:045) (Offered Fall and Spring)
900:050. Introduction to Peace Studies - $1 \mathbf{h r}$.
Lectures and readings on the nature of personal and structural violenct Culture, political economy, and technology of war and peace. (Variable) $\mathbf{9 0 0 : 0 5 1}$. Peace Studies II - 1 hr .
Study of current peace research with emphasis on proposed solutions to problems of war and violence in modern society. (Variable)
900:080. Conflict and Social Reconstruction - 3 hrs.
Critical analysis of conflict in social relations. Employs systems framel work to examine stress, alienation, reciprocity, social support and socie reconstructions. Exploration of interpersonal, organizational and com munity conflict with emphasis on race, gender, and class. Includes simut lations and small group activities. (Variable)

## $900: 085$. The Nature of Social Issues - 3 hrs.

Comparison of biological, physiological, psychological, and cultur evidence used to explain behavior associated with gender, race, and class. Exploration of variety of social issues including human sexualits, sexual preference, reproduction, intelligence, criminal behavior, health and mental health. Cross-cultural data will be used to explore nature of evidence. (Variable)

## 900:090. Children and Youth: Issues and Controversies - 3 hrs.

Use of social scientific theoretical frameworks and data to examind causes, consequences, and policy implications of issues and controversi affecting children and youth. (Variable)
900:135. Canadian Studies - 3 hrs.
Survey of the physical landscape, history, demographic patterns, cultured and political/economic systems of Canada, including detailed examinale tion of the country's regional geography and the challenges facing the nation's future. (Same as 970:142) (Offered odd Springs)
$\mathbf{9 0 0 : 1 4 5 ( g ) . ~ S e m i n a r ~ i n ~ A m e r i c a n ~ E t h n i c ~ S t u d i e s ~ - ~} 3$ hrs.
Concluding course for the American Ethnic Studies minor, bringinf together various components of the minor's core curriculum and adid dressing theories and practices affecting study of ethnicity in the U.S Prerequisites: 450:045 or 900:045 or 980:045; completion of 18 hours int the minor; senior standing or consent of Director of American Ethni Studies program.

900:150. Senior Seminar in Women's Studies - 1 hr .
Students synthesize and extend knowledge gained from previous course work and apply it to their major in a professional portfolio. Prerequisites: a declared Women's Studies minor; senior standing; or consent of instructor. (Offered Spring)

## 900:165(g). Survey Research Methods - 3 hrs.

Introduction and application of methods used in survey research and public opinion polling. Emphasis on survey sampling, index and scale construction, questionnaire design, pre-testing, and report production. Prerequisites: 980:108; junior standing. (Same as 980:165g) (Offered odd Springs)

## 900:190. The Teaching of the Social Studies - 3 hrs.

Ordinarily should precede student teaching. Prerequisite: 12 hours in social science; senior standing. Corequisite: 900:191. (Variable)
900:191. Field Experience: Teaching Social Studies - 1 hr .
Ordinarily precedes student teaching. Direct experiences in teaching 6-12 social studies. Focus on lesson and unit planning, classroom management, and teaching methods. Bi-weekly seminar. Offered on credit/no credit basis only. Prerequisite: 12 hours in social science; formal application; senior standing; consent of instructor. Corequisite: 900:190. (Variable)
900:195. Internship in Women's Studies - 1-3 hrs.
Experiential application of theory and scholarship. Responsibilities determined by faculty advisor, on-site supervisor, and student, according to organizational needs and career goals. Prerequisites: Women's Studies minor with completion of two or more core courses; junior standing or consent of instructor. (Variable)
900:199(g). Study Tour - 1-8 hrs.
Directed program of study abroad. Programs to Europe, Asia, Latin America, Middle East, and other world areas. Study of social, historical, economic, and/or political characteristics of other countries and cultures.
Prerequisite: junior standing. (Variable)
900:200. Social Science Seminar - 3 hrs.
May be repeated for maximum of 6 hours. Prerequisite: consent of department. (Variable)
900:297. Practicum.
(Variable)
$900: 299$. Research.
(Variable)

## 920 Economics

920:020. Introduction to Decision Techniques - 3 hrs.
Quantitative and qualitative aspects of problem solving and decision making. Structuring and basics of decision making, applications of probability, functional relationships, marginal analysis, and linear programming. Emphasis on model formulation and interpretation of results. May not be used for credit on the Economics major or minor or the Social Science major or minor. Prerequisite: 800:072 or $800: 092$ or equivalent. (Offered Fall, Spring, and Summer)
920:024. Introduction to Economics - 3 hrs .
Overview of economics, including how a market system functions and how national income, output, and employment are determined. Primary focus (though not exclusively) on U.S. economy. No credit for students who have credit or are concurrently enrolled in 920:053 or 920:054. May not be used for credit on major or minor. (Offered Fall, Spring, and Summer)

## 920:053. Principles of Macro-Economics - 3 hrs.

Introduction to the economizing problem and economic institutions. National income determination, monetary and fiscal policy, and global economic issues. (Offered Fall, Spring, and Summer)

## 920:054. Principles of Micro-Economics - 3 hrs.

Study of producers and consumers in product and input markets. Ap-
plications of microeconomic theories to issues such as income distributions, the environment, agriculture, labor markets, government policies toward business, and others. Prerequisite: 920:053. (Offered Fall, Spring, and Summer)
920:070. Business Statistics - $\mathbf{3}$ hrs.
Application and interpretation of probability and statistics as applied to business problems. Descriptive statistics, hypothesis testing, linear regression, and correlation. May not be used for credit on the Economics major or minor or the Social Science major or minor. Prerequisite: 800:072 or 800:092 or equivalent. (Offered Fall, Spring, and Summer)
920:103. Intermediate Macro-Economic Theory - 3 hrs.
Intermediate level macro-economics. Determinants of aggregate demand, national product and employment; and macro-economics objectives and policies. Prerequisites: 920:053; 920:054. (Offered Fall and Spring)
920:104. Intermediate Micro-Economic Theory - 3 hrs.
Intermediate level micro-economics. Theory of consumer choice, business firm, and resource allocation. Prerequisites: 920:053; 920:054. (Offered Fall and Spring)

## 920:113. Money and Banking - 3 hrs.

Money, commercial banking, the Federal Reserve System, and monetary policy. Prerequisites: 920:053; 920:054. (Offered Fall and Spring)
920:116(g). Labor Economics - 3 hrs.
Application of economic analysis to behavior of employers and employees. Prerequisites: 920:053; 920:054; junior standing. (Offered Fall)
920:117(g). Public Finance - 3 hrs.
Taxation and government expenditures; fiscal policy. Prerequisites: 920:053; 920:054; junior standing. (Offered Spring)

## 920:120(g). Economics of Natural Resources - 3 hrs.

Allocation of non-renewable and renewable resources over time; energy resources, minerals, water, and fisheries, along with the concept of growth in finite environment. Prerequisites: 920:053; 920:054; junior standing. (Variable)
920:123(g). Environmental Economics - 3 hrs.
Allocative efficiency, environmental quality as a public good, pollution as an economic problem, and estimating an economic value for environmental (non-market) goods. Prerequisites: 920:053; 920:054; junior standing. (Variable)

## 920:125(g). Cost-Benefit Analysis - 3 hrs.

Impact of public projects on resource allocation and social well being. Meaning and interpretation of Net Present Value (NPV). Problems encountered in quantifying various components of NPV and merits of alternative solutions. Prerequisites: 920:053; 920:054; junior standing. (Offered Fall)
920:128. Law and Economics - 3 hrs.
Analysis of the influence of legal rules and institutions on the economic behaviors of individuals. Examination of the principles of economics as they relate to private and public law, with special emphasis on economic efficiency and equity. Applications from civil procedure, criminal, contract, and tort law. Prerequisites: 920:053; 920:054. (Offered Spring)
920:135(g). The Organization of American Industry - 3 hrs.
Structure, conduct, and performance of firms, industries, and market. Policies to maintain competition. Prerequisites: 920:053; 920:054; junior standing. (Variable)
920:136/g). International Economics - 3 hrs.
International trade theory, trade strategies, economic unions, and factor movements. Prerequisites: 920:053; 920:054; junior standing. (Offered odd Falls)
920:137(g). Comparative Economic Systems - 3 hrs.
Examination of capitalistic and socialistic economies through the work of their defenders and critics. Prerequisites: 920:053 and 920:054, or consent of instructor; junior standing. (Variable)

## 920:143(g). Economic Development - 3 hrs.

Characteristics of developing nations, causes of underdevelopment, development theories, and development strategies. Prerequisites: 920:053; 920:054; junior standing. (Offered odd Springs)
920:148(g). Urban and Regional Economics - 3 hrs.
Theory of location and regional development; factors influencing growth and location of production, location of households, city location and urban hierarchies, and land use patterns; measures and change in regional economic activity; and public policy issues in regional and urban evolution. Research methods including economic base, employment multiplier, location quotient, and threshold analyses. Prerequisites: 920:053 and 920:054, or consent of instructor; junior standing. (Offered Fall)
920:160(g). Managerial Economics - 3 hrs.
Application of economic theory and methods to business and administrative decision making. Prerequisites: 920:053; 920:054; junior standing. (Offered Fall)

## 920:168(g). Mathematical Economics - 3 hrs.

Application of mathematics to economics with an emphasis on matrices and introductory calculus. Prerequisites: 920:053 and 920:054, or consent of instructor; junior standing. (Offered even Falls)
920:169(g). Introduction to Econometrics - 3 hrs .
Econometric techniques and the development of statistical techniques unique to the economics; econometric relationships derived in single and multivariate linear and non-linear regression analysis; use of statistical inference in econometric investigation with applications to classical works of economic topics. Prerequisites: 800:072; 920:053 and 920:054, or consent of instructor; junior standing. (Offered Spring)
$\mathbf{9 2 0 : 1 7 0 ( g ) . ~ H i s t o r y ~ o f ~ E c o n o m i c ~ T h o u g h t ~ - ~} 3$ hrs.
Development of economic theory from early Greeks to John Maynard Keynes. Prerequisites: 920:053; 920:054; junior standing. (Variable)
920:175(g). International Financial Economics - 3 hrs.
International financial theories and analysis of balance of payments, alternative exchange rate regimes, and capital movements. Prerequisites: 920:053; 920:054; junior standing. (Offered even Falls)
920:177. Internship in Community Economic Development - 1-3 hrs.
Practical experience in a business, industry, or government agency. May be repeated for maximum of 3 hours. Prerequisites: 920:053; 920:054; three 100 -level economics courses from UNI; junior standing; consent of department head. (Offered Fall, Spring, and Summer)
920:179. Cooperative Education in Economics - 1-3 hrs.
Compensated work experience in conjunction with an academic project conducted under faculty guidance. University elective credit is given on a graded basis. Prerequisites: 920:103; 920:104; cumulative UNI GPA of 3.00 or higher required prior to application; consent of department head. (Offered Fall, Spring, and Summer)
920:181 (g). Directed Research in Economics - 3 hrs.
Students demonstrate their grasp of economic theory and their writing abilities. Prerequisites: 920:053; 920:054; 920:103; 920:104; senior standing; Economics major. (Offered Spring)
920:260 Managerial Economics - 3 hrs.
Application of economic theory and methods to business and administrative decision making. Prerequisites: 920:053; 920:054; consent of MBA Director. (Offered Fall)
920:280. Topics in Economics - 1-3 hrs.
Topics listed in Schedule of Classes. May be repeated for maximum of 6 hours. Prerequisite: Consent of MBA Director. (Variable)
920:285. Individual Readings - 1-3 hrs.
Prerequisites: consent of MBA Director and department head. (Offered Fall, Spring, and Summer)
920:299. Research. - 1-6 hrs.
Prerequisites: consent of MBA Director and department head. (Offered Fall, Spring, and Summer)

## 94_Political Science

## 940 (Political Methodology)

940:010. Scope and Methods of Political Science - 3 hrs.
Introduction to qualitative and quantitative research methods in politic science. (Formerly 940:110) (Offered Fall and Spring)
940:020. Contemparary Political Problems - 3 hrs.
Analysis of selected contemporary political issues. Focus may be on locall state, national, or international level. (Variable)
940:111. Introduction to Quantitative Methods in Political Science -

## 3 hrs.

Introduction to basic statistical methods appropriate to data analysis in political science and public administration. (Offered Fall and Spring) 940:176(g). Research Methods in Public Administration - 3 hrs.
Applications of statistical and computer analysis techniques to problemy of public management. Prerequisite: junior standing. (Offered Fall)

## 940:181. Intemship in Politics - $4-8$ hrs.

Student serves as intern with government official or in public or privat agency: (1) Federal; (2) State; (3) Local; (4) Intergovernmental; (5) Legal (6) Interest Group; (7) International; and (8) Electoral. Prerequisite 940:010; 15 hours of political science; Political Science, Political Com munication, or Public Administration major; junior standing or consenof department. (Offered Fall, Spring, and Summer)
940:188. Seminar in Political Science - 3 hrs.
Undergraduate seminar covering selected advanced topics in politic science. Prerequisites: junior standing; completion of a minimum of 12 hours in major. (Variable)
940:189(g). Readings in Political Science - 1-3 hrs.
May be repeated only with consent of department. Prerequisites: 12 hour in political science; junior standing; consent of department. (Offered Fall, Spring, and Summer)

## 940:198. Independent Study.

(Offered Fall, Spring, and Summer)
940:285. Individual Readings - $1-3 \mathrm{hrs}$.
May be repeated. (Offered Fall, Spring, and Summer)
940:299. Research.
(Offered Fall, Spring, and Summer)

## 941 (Political Theory)

941:122. Democracy and Democratization - 3 hrs.
Analysis of possible causes of democratization, various paths to democ racy, and relationship between democratization paths and types of de-1 mocracy. (Formerly 940:122g) (Variable)

## 941:129. American Political Thought - 3 hrs.

Moral and philosophical foundations of American democracy; clos, reading of key texts in American constitutional history; and attempt to apply the teachings of these texts to the question, "For what does the American regime stand?" (Formerly 940:129g) (Variable)
941:156. Issues in Political Thought - 3 hrs.
Examination and analysis of one or more significant issues in politic thought. (Formerly 940:156g) (Offered Spring)
941:160. Classical Political Philosophy - 3 hrs.
Perennial issues of political philosophy as presented by the major thinkert of classical antiquity with emphasis on competing views of human naturl and their political implications. Formerly $940: 160 \mathrm{~g}$ ) (Variable)

## 941:161. Modern Political Philosophy - 3 hrs.

Perennial issues of political philosophy beginning with Machiavelli to present. Emphasis on philosophical foundations of this century's ideolo gies. (Formerly 940:161g) (Variable)

## 942 (American Politics)

942:014. Introduction to American Politics - 3 hrs.
Processes and functions of American government in relation to concepts of American democracy and to practices of other governments. (Formerly 940:014) (Offered Fall and Spring)

## 942:048. Introduction to Public Administration - 3 hrs.

Role of bureaucracy in policy making and implementation in a representative government. Theories, concepts, and selected case studies in public administration. (Formerly 940:148 and 942:148) (Offered Fall and Spring)

## 942:112. Campaigns and Elections - 3 hrs.

Systematic examination of structure and functions of modern electoral campaigns for national, state, and local offices. (Formerly 940:112g) (Offered even Falls)

## 942:120. Bureaucratic Politics - 3 hrs.

Relationship of public agencies with their three masters: the Congress, the President, and the Judiciary. Role and impact of public agencies in public policy process. (Formerly 940:120g) (Variable)
942:131. American State Politics - 3 hrs.
Analysis of organization, functions, and operation of state and local governments. Prerequisite: sophomore standing or consent of instructor. (Formerly 940:131) (Offered Fall)

## 942:132. Community Politics - 3 hrs.

Introduction to structure, functions, and policies of American local government in context of economic, social, and intergovernmental forces. Prerequisite: sophomore standing or consent of instructor. (Formerly 940:132) (Offered Spring)

## 942:134. Legislative Politics - 3 hrs.

Theoretical and empirical examination of institutional working of Congress and behavior of legislators. (Formerly 940:134g) (Offered Fall)

## 942:136. Administrative Law - 3 hrs.

Judicially-enforceable requirements upon administrative agencies which affect private interests by making rules and orders, adjudicating cases, investigating, prosecuting, publicizing, and advising. Legislative and executive controls over the agencies. (Formerly $940: 136 \mathrm{~g}$ ) (Variable)
942:141. Constitutional Law - 3 hrs.
Analysis of U.S. Supreme Court decisions and changes in doctrine over time and the political forces affecting these changes. Emphasis on the powers and constraints of the federal government, separation of powers, and federalism. Prerequisites: 942:014 or 942:146 or 942:147. (Formerly $940: 141 \mathrm{~g}$ ) (Offered Fall)
942:142(g). Problems in Juvenile and Family Law - 3 hrs.
Aspects of juvenile and family law; how legislature and courts have developed juvenile and family law, including marriage and divorce, adoption, and competency of minors. Prerequisite: junior standing. (Formerly $940: 142 \mathrm{~g}$ ) (Offered Fall and Spring)

## 942:144. Civil Rights and Liberties -3 hrs.

Examines the Supreme Court's role in establishing and protecting individual rights and liberties from government intrusion. Emphasis on the $14^{\text {th }}$ Amendment of the Constitution. Includes issues of free speech, freedom of religion, discrimination, and privacy. Prerequisite: 942:141. (Offered Spring)

## 942:145. Law and Politics - 3 hrs.

Study of courts in America today with emphasis on Appellate court procedures, decision making, and politics. (Formerly 940:146) (Offered Fall)
942:147. Law and the Courts -3 hrs.
Study of courts in America today with emphasis on trial courts and criminal rights. (Formerly 940:147) (Offered even Springs)

## 942:150. Political Opinion and Voting Behavior - $\mathbf{3}$ hrs.

Theoretical and empirical analyses of public opinion, political specialization, and political attitudes and behavior, with emphasis on voting behavior. (Formerly 940:150g) (Offered Spring)

## 942:151. Modern Presidency - 3 hrs.

Systematic examination of structure, functions, and powers of American presidency as they have evolved from FDR to present. (Formerly 940:151g) (Offered Spring)

## 942:153(g). Public Organizations - 3 hrs.

Theories and models of internal dynamics of public organizations and their role in the political milieu; characteristics and operation of American public organizations. Prerequisites: 942:014 or 942:048; junior standing. (Formerly $940: 153 \mathrm{~g}$ ) (Offered Fall)
942:154. Ethics in Public Administration - 3 hrs.
Current ethical issues in public administration; analysis of ethics in theory as applied to public sector. Applications of ethical codes to administrative practice. Prerequisite: 942:048. (Formerly 940:154) (Variable)

## 942:155(g). Environmental Policy Making - 3 hrs.

Analysis of environmental conditions, policies, policy-making processes, and factors influencing policy in the United States, at the national, regional, state, and local levels. Prerequisite: junior standing. (Formerly $940: 155 \mathrm{~g}$ ) (Offered odd Springs)
942:166(g). Political Parties and Interest Groups - 3 hrs.
Rise of interest groups and decline of parties in American political system; role of interest groups in policy process; organization and maintenance of political parties and interest groups. Prerequisites: 942:014; junior standing. (Formerly 940:166g) (Variable)

## 942:171(g). Urban Development and Administration - 3 hrs.

Theoretical perspectives on the processes of urban development and problems of urban administration and policy making. Prerequisites: 942:014; 942:132; junior standing. (Formerly 940:171g) (Offered even Falls)

## 942:172. Public Budgeting - 3 hrs .

Historical development of current budgeting practices; politics of budgetary process at federal, state, and local levels; current methods of budgeting for public agencies, focusing on integration of budgeting into program planning. Prerequisites: 942:014; 942:048. (Formerly 940:172g) (Offered Spring)

## 942:173(g). The Public Policy Process - 3 hrs .

Theories and models of policy process in the United States, including agenda setting, formulation, adoption, implementation, and evaluation. Application of theories and models to case studies of major policy issues. Prerequisites: 942:014; 942:048; junior standing. (Formerly 940:173g) (Offered Fall)

## 942:174. Public Personnel Administration - 3 hrs.

Development of current government personnel practices; contemporary issues in personnel administration; techniques of job analysis; recruitment and selection of employees; and problems of supervision and evaluation. Prerequisites: 942:014; 942:048. (Formerly 940:174g) (Offered Spring)

## 942:175. Applied Public Budgeting - 3 hrs.

Emphasis on reading, preparing, and justifying public budgets. Practical experience in budgetary analysis, financial management, debt, cash, and risk management, forecasting, and capital budgeting. Prerequisites: 942:014; 942:048. (Offered Fall)

## 942:188. Seminar in Public Administration - 3 hrs.

Advanced topics in public administration, such as essential and nonessential service delivery, fiscal administration, and community development. Introduces students to issues not covered in other public administration courses. Prerequisite: 942:048. (Offered Spring)

## 943 (International Relations) <br> 943:024. International Relations - 3 hrs .

Survey of various approaches to international relations with special emphasis on application to historical and contemporary cases. Not open to students who have credit in 940:026. (Formerly 940:124) (Offered Fall and Spring)

## 943:118. International Relations Theory - 3 hrs.

Analysis of major theoretical traditions and concepts in international relations. Emphasis on analytical arguments of Realism, Liberalism, Marxism, with the Levels of Analysis approach. (Formerly 940:118g) (Offered Fall)

## 943:119(g). International Political Economy - 3 hrs.

Analysis of interaction between pursuit of power and pursuit of wealth in the international system. Emphasis on changes in rules for monetary and trade relations since 1945. Prerequisites: 943:024; junior standing. (Formerly $940: 119 \mathrm{~g}$ ) (Offered Spring)

## 943:125(g). North-South Relations - 3 hrs.

Analysis of political, social, and economic disparities and mutual interdependence between developing and developed nations. Examination of need for a new international economic order, and issues of energy, food, raw materials, population, and transfer of technology. Prerequisite: junior standing. (Formerly 940:125g) (Offered even Falls)

## 943:126. Human Rights - 3 hrs.

Examination of the origins and development of the concept of Human Rights. Review of the major challenges to global human rights, including genocide, racism, political repression, national/religion oppression, and gender discrimination. Emphasis on the international institutions, norms, and policies of states and non-state actors to define and promote human rights. (Offered odd Springs)
943:127. United States Foreign Policy - 3 hrs.
Historical and theoretical examination of the individual, domestic, and systemic factors which affect formulation of United States foreign policy. (Formerly 940:127g) (Offered Spring)
943:128. Comparative Foreign Policies - 3 hrs.
Examination of theoretical approaches to foreign policy analysis; application and analysis of these approaches to the foreign policies of major powers. (Offered Spring)

## 943:137(g). Environmental Policy Making in a Comparative Perspective -3 hrs.

Analytical discussion of the environmental policy-making process in a comparative perspective. Prerequisite: junior standing. (Variable)
943:143. International Law - 3 hrs.
Survey of international law from its development to contemporary issues. (Formerly 940:143g) (Offered Fall)
943:145. International Organizations - 3 hrs.
Description of international governmental and nongovernmental organizations, and analysis of their roles in international politics. (Formerly 940:145g) (Offered odd Falls)

## 944 (Comparative Politics)

944:040. Comparative Politics - 3 hrs .
Examination of theory, methods, and problems of comparative politics with emphasis on cross-regional analysis. Use of case studies to look at such issues as political culture, parties, participation, dictatorship and democracy, economic policies and class, and racial, ethnic or religious conflict. (Formerly 940:040) (Offered Fall and Spring)
944:121. Terrorism - 3 hrs.
Examination of terrorism as a political phenomenon. Focus on terror-ism-related theme with examination of both theoretical and policy issues related to the history, psychology, and motives of terrorism using cases from around the world. (Formerly 940:121g) (Offered odd Falls)
944:123. Nationalism - 3 hrs.
Analysis of causes, forms, and consequences of nationalist movements. Consideration of experiences of nation-states and multi-national states. Evaluation of major theoretical approaches to study of nationalist movements and application to several specific cases. (Formerly 940:123g) (Offered Spring)

944:130. Women and Politics in Comparative Perspective - 3 hrs.
Examination of changing political roles of women and gender-basel movements with special attention to how gender interacts with racial class, and religious identities in shaping political attitudes, activities, and organizations. (Formerly 940:130g) (Variable)
944:135. Western European Democracies - 3 hrs.
Political institutions, processes, and policies of Western European Democracies. Emphasis on United Kingdom, France, Germany, and Italy, Development and prospects of European Community. (Formerly 940:135, (Offered odd Falls)
944:149(g). Comparative Administration - 3 hrs.
Analysis of models and theories of comparative administration by adop ing idiographic approach and explanation of differences in administru tive behavior of different administrative systems. Prerequisite: junio, standing. (Formerly 940:149g) (Variable)
944:162. Politics of East Asia - 3 hrs.
Comparative analysis of major Ėast Asiạn countries; examination of state and nation-building processes, political institutions, and processes and policies, with emphasis on China and Japan. (Formerly 940:162g) (Offerel] Fall)
944:164. Russian and East European Politics - 3 hrs.
Analysis of regimes and regime changes in Russia and Eastern Europ. Examination of institutions, contemporary issues, and processes in comparative context. (Formerly 940:164) (Offered odd Falls)
944:165. African Politics - 3 hrs.
Examination of African politics from a political economy perspectir (Formerly 940:165g) (Offered Spring)

## 944:167. Latin American Politics - 3 hrs.

Factors influencing political and economic development. Emphasis on social classes, political regimes, role of state, and world capitalist economy. (Formerly 940:167g) (Offered even Falls)

## 950 Public Policy

950:205. Research Seminar in Public Policy - 1 hr.
Seminar on questions of public policy analysis. Topics vary. May be repeated. Prerequisite: admission to the graduate program in Public Polic or consent of Director of Graduate Program in Public Policy. (Offerel Fall and Spring)
950:208. Applied Research and Bibliography in Public Policy - $\mathbf{3}$ hrs. Exploration of established research and available sources in participan! focus area in public policy. Successful completion satisfies prograr writing requirement. Prerequisites: 920:117; 940:275; 942:153; 942:173 960:225. (Offered Fall)

## 950:260. Policy Analysis: Methods and Approaches - 3 hrs.

Research methods and approaches for analyzing and evaluating publit policy choices and impacts. Understanding the context and purpose of policy analysis. Defining policy research questions and developir research designs. Selecting and applying appropriate research method to policy problems. Prerequisite: enrollment requires admission to the Graduate Program in Public Policy, or consent of Director of Graduad Program in Public Policy. (Offered Fall)

## 950:275. Quantitative Methods for Politics and Policy - 3 hrs .

Statistical methods appropriate to study of political science and publi policy, including hypothesis testing, nominal and ordinal scale measurel of association, bivariate regression/correlation, and multiple regre sion. Prerequisite: 940:111, 980:080, or consent of instructor. (Former) 940:275) (Offered Spring)

## 950:281. Internship in Public Policy - 4 hrs.

Field experience for students enrolled in Master of Public Policy degre program. Students may be given credit for extensive career experience at the discretion of the Program Director. Prerequisites: 940:275; 942:173; 950:205. (Offered Fall, Spring, and Summer)

## 950:285. Readings in Public Policy - 1-3 hrs.

Registration requires written consent of Program Director. (Offered Fall, Spring, and Summer)

## 960 History

960:010. Introduction to the Study of History - $\mathbf{3}$ hrs.
Introduction to nature and use of history, to historiography, and to basic methods of historical research. Required of all History majors and must be taken immediately after major is declared. (Offered Fall and Spring) 960:014. United States History to 1877 - 3 hrs.
Events, factors, and personalities which shaped social, economic, and political development of the United States from settlement to end of Reconstruction. (Offered Fall and Spring)

## 960:015. United States History since 1877 - 3 hrs.

End of Reconstruction period to present, including economic, diplomatis, intellectual, political, and social factors. (Offered Fall and Spring)
960:101(g). History of Ancient Greece - 3 hrs .
Archaeology of the Aegean and the Minoan-Mycenaean civilization; Homeric period, classical civilization of Greece to Alexander the Great, and the Hellenistic Age; advent of the Romans. Prerequisite: junior standing. (Offered odd Falls)
960:102(g). History of Technology in America - 3 hrs.
Examination of the nature, impact, and consequences of American technology - both at work and at home, in the city and in the country. Prerequisite: junior standing. (Offered even Springs)

## $960: 103(\mathrm{~g})$. History of Ancient Rome - 3 hrs.

Roman Republic, expansion of Roman rule, Roman Empire, decline and fall of the empire in 5th century A.D. Comparison of the Romans as people with modern Americans. Prerequisite: junior standing. (Offered even Springs)
960:104(g). Women and Work: An Historical Perspective - 3 hrs.
Examination of changing nature of women's work during pre-industrial period, Industrial Revolution, and 20th century, primarily in Europe and United States. Emphasis on impact of technological change, sexual division of labor, and women's participation in labor organizations and strikes. Prerequisite: junior standing. (Variable)
960:106(g). Applying History: The Public Alternative - 3 hrs.
Exploration of employment possibilities other than teaching for those with degrees in history. Examination of skills required to pursue a career in public history and a variety of issues that public historians confront. Prerequisite: junior standing. (Offered Fall)
960:116(g). Recent United States History - 3 hrs.
History of the American people since 1945 with emphasis on domestic affairs. Prerequisite: junior standing. (Offered Spring)
960:122(g). African-American History - 3 hrs.
History of black Americans from African background into 1980s, with emphasis on period since end of slavery. Prerequisite: junior standing. (Offered Fall)
960:123(g). History of Classical Civilization - 3 hrs.
Cultural survey of the Greco-Roman world from the eighth century B.C. to the fifth century A.D. Subject matter includes elite culture, such as literature, philosophy, and religion, as well as aspects of everyday life, such as clothing, food and drink, and entertainment. Prerequisite: junior standing. (Offered even Falls)
960:124(g). The City in United States History - 3 hrs.
Introduction to urban history; functions, shapes, and dynamics of the city in the American experience from 17th century to present with emphasis on metropolis of the past half century. Prerequisite: junior standing. (Offered odd Springs)
960:125(g). Introduction to Museum Studies - 3 hrs .
Exploration of history, public mission, working environment, and ethical
issues of museums. Discussion of practical skills and theoretical issues of museum studies, exposing students to broad range of museum types and career opportunities. Prerequisite: junior standing. (Same as 990:125g) (Offered even Springs)

## $960: 126(\mathrm{~g})$. History of Ireland - 3 hrs .

Survey of Irish history from the age of conquests (Celtic, Viking, AngloNorman, and English) to the present with an emphasis on the development of political and cultural nationalism in the nineteenth century. (Offered odd Springs)

## 960:127(g). Pre-Modern Japan - 3 hrs.

Prehistory until early modern period (about 1800). Overview of Japan's roots, surveys the early Japanese state, and analyzes the processes of decentralization and reunification. Prerequisite: junior standing. (Offered Fall)

## 960:128(g). Modern Japan - 3 hrs.

Description of first non-Western nation to become a modern economic superpower. Traces development in political, social, economic, and cultural aspects from 1800 to present. Prerequisite: junior standing. (Offered Spring)
$960: 130(\mathrm{~g})$. History of lowa - 3 hrs .
Social, political, and economic developments in lowa from prehistoric times to present. Prerequisite: junior standing. (Offered Spring)

## $960: 131(\mathrm{~g})$. U.S. History from 1919 to 1945 - 3 hrs.

U.S. history from end of World War I to end of World War II, emphasizing social tensions and economic developments of the 1920s, Great Depression and New Deal of 1930s, and wartime diplomacy and mobilization of the home front in the 1940s. Prerequisite: junior standing. (Offered Fall) 960:132(g). Internship in Historical Studies - 1-3 hrs.
Individualized study and experience in public history settings. Work projects defined by instructor, site supervisor, and student. Attendance at weekly forum mandatory, and term paper reflective of the experlence is required. Prerequisites: Iowa History course (recommended); $960: 106$; junior standing; consent of instructor. (Offered Fall and Spring)

## $\mathbf{9 6 0 : 1 3 4 ( g )}$. United States Economic History - 3 hrs.

Efforts of the people to raise standard of living, their means of livelihood, and development of national economy. Exploration of theory of economic growth. Prerequisite: junior standing. (Variable)
960:135(g). Indians in American History - 3 hrs.
Survey of the North American Indian experience over four centuries, with emphasis on the $19^{\text {th }}$ and $20^{\text {th }}$ centuries. Focus on Native response to European colonialism, removal, allotment, termination, revitalization, urbanization, Red Power, and pan-Indian movements. Prerequisite: junior standing. (Offered Spring)
$\mathbf{9 6 0 : 1 3 6 ( g ) . ~ A m e r i c a n ~ C o l o n i a l ~ H i s t o r y ~ - ~} 3$ hrs.
17th- and 18th-century America; development of colonial societies in the New World and American Revolution era. Prerequisite: junior standing. (Offered Fall)

## 960:137(g). From Jefferson to Jackson - 3 hrs.

Political, economic, and social development of United States in years between American Revolution and end of Jacksonian era. Prerequisite: junior standing. (Variable)
960:139(g). Civil War and Reconstruction - 3 hrs.
Causes of the Civil War, nature of the conflict, and short- and long-range consequences of the war. Prerequisite: junior standing. (Offered Fall)
960:140(g). History of the West - 3 hrs.
Westward movement of the people, from the Atlantic to Pacific; impact of over two centuries of frontier experience on the course of the nation's history and in shaping of "American" character. Prerequisite: junior standing. (Offered Fall)

## 960:141(g). The South in United States History - 3 hrs.

Traces the southern experience from colonization and settlement through the Civil War, Reconstruction, and late 19th- and 20th-century racial and
political adjustments．Emphasis on post－Reconstruction period and role of blacks in shaping southern society．Prerequisite：junior standing． （Offered odd Springs）

## 960：142（g）．United States Constitutional History－ 3 hrs．

Relates individual rights，political－socioeconomic issues，and rivalry among the Presidency－Congress－Supreme Court to development of U．S． Constitution．Prerequisite：junior standing．（Offered Fall）
960：143（g）．United States Labor History－ 3 hrs．
Survey of the experiences and meanings of work in the Untied States from the period of early industrialization to the present，with a focus on common workers，labor leaders，unions，and the ways the American definition of＂worker＂has intersected with ideologies of race，class，and gender．Prerequisite：junior standing．（Offered Fall）

Historical examination of principal idea－systems which shaped the in－ tellectual profile of American civilization．Prerequisite：junior standing． （Offered odd Springs）

## 960：145（g）．Religion in America－ 3 hrs．

Investigation of religious movements and beliefs from colonial times to present．640：024 or 650：021 recommended to precede this course．Prereq－ uisite：junior standing．（Same as $640: 117 \mathrm{~g}$ ）（Offered odd Springs）
960：146（g）．History of Women in the United States－ 3 hrs．
Survey of social，cultural，and economic roles of women in the United States from founding to present，with some comparative analysis of women＇s roles in other areas of the world．Prerequisite：junior standing． （Offered Fall）
960：147（g）．Foundations of Modern America：The United States，1877－ 1919－3 hrs．
Description and analysis of dramátic social，cultural，economic，and politi－ cal changes occurring in the U．S．between the close of Reconstruction and end of World War I．Prerequisite：junior standing．（Offered even Falls）
960：150（g）．Society and Culture in the United States－ 3 hrs．
Description and analysis of the development of and changes in com－ munity，family，social stratification，nature of reform，morality，uses of leisure time，and attitudes toward science and religion in 19th and 20th centuries．Prerequisite：junior standing．（Offered odd Falls）

## 960：151（g）．The Ancient Near East－ 3 hrs．

The artistic，literary，political，religious，and social accomplishments of Near Eastern people of ancient times．Prerequisite：junior standing． （Offered odd Springs）

## 960：152（g）．Medieval Civilization－ 3 hrs．

Social，economic，political，and cultural features seen as foundations of the modern period．From Fall of Rome to 15 th century．Prerequisite： junior standing．（Offered even Springs）
960：153（g）．The Renaissance and Reformation－ 3 hrs．
Intellectual，artistic，economic，and political developments of the Italian and Northern Renaissance，culminating in an examination of the 16th－ century Reformation．Prerequisite：junior standing．（Variable）
$\mathbf{9 6 0 : 1 5 4 ( g ) . ~ M i l i t a r y ~ H i s t o r y ~ f r o m ~ N a p o l e o n ~ t o ~ t h e ~ P r e s e n t ~ - ~} 3$ hrs．
Study of causes and conduct of war and impact of war on society， with emphasis on 20th century．Prerequisite：junior standing．（Offered Spring）
960：155（g）．Europe from the French Revolution to World War I－ 3 hrs．
Emphasis on political unification，the economic，intellectual，and social impact of advances in science and technology，and the decline of the European concert leading to war in 1914．Prerequisite：junior standing． （Variable）
960：156（g）．History of European Popular Culture－ 3 hrs．
Examination of various aspects of everyday life in European history， including work，leisure，diet，housing，health，sanitation，role of women， status of children，family life，popular festivals，fashions，fads，sports，and games．Prerequisite：junior standing．（Offered even Falls）

960：157（g）．Great Power Diplomacy from the Congress of Vienna to the Present－ 3 hrs．
International diplomacy from 1815 with emphasis on 20th century．Pre－ requisite：junior standing．（Offered even Falls）
$\mathbf{9 6 0 : 1 5 8 ( g )}$ ．Age of Absolutism and the Enlightenment－ 3 hrs ．
History of emerging nations of Europe with emphasis on Age of Absorf lutism，Louis XIV，and the Enlightenment．Prerequisite：junior standind （Offered odd Falls）
$\mathbf{9 6 0 : 1 6 0 ( g ) . ~ E u r o p e ~ f r o m ~ W o r l d ~ W a r ~ I ~ t o ~ t h e ~ P r e s e n t ~ - ~} 3$ hrs．
Study of impact of World War I，rise of Communism and Fascism，impad of World War II，and European Renaissance since 1945．Prerequisite：ju + nior standing．（Variable）
960：161（g）．Women in Modern European History－ 3 hrs．
History of all facets of women＇s experience（beginning about 1700） emphasizing their economic roles，position in the family，sexuality，and political struggles．Exploration of sources of women＇s oppression and theories of liberation．Prerequisite：junior standing．（Offered Spring）
960：162（g）．European Thought since the Enlightenment－ 3 hrs．
Selected ideas and men in 19th and 20th centuries．Prerequisite：junio standing．（Variable）

## $960: 163(\mathrm{~g})$ ．History of the Jewish People－ 3 hrs．

Broad sweep of Jewish history from its genesis to present day，focusing on interrelationship of Jewish civilization and non－Jewish cultures．Prere⿻丅⿵冂⿰⿱丶丶⿱丶丶⿴囗十灬丶 uisite：junior standing．（Variable）
960：164（g）．English History to 1688 － 3 hrs．
England and the British Isles：Celtic and Roman times，England in the Middle Ages，Tudor－Stuart dynasties，the Glorious Revolution of 1688 ； England＇s beginnings as a great power and her relations with the rest of Europe．Prerequisite：junior standing．（Offered odd Falls）
960：165（g）．English History since 1688 － 3 hrs．
English political，economic，social，and intellectual history with emphasí on the Victorians and 20th century；British Empire and Commonwealth］ Prerequisite：junior standing．（Offered even Springs）
960：166（g）．United States Legal History－ 3 hrs．
Historical examination of selected issues in relationships between law and society in American history．Topics include law and the colonial family legal aspects of the American Revolution，criminal law，law and economi development，and law and race．Prerequisite：junior standing．（Variable）］ 960：169（g）．History of Imperial Russia－ 3 hrs．
Political，social，economic，and cultural aspects of Russia with emphasi on 19 th century．Prerequisite：junior standing．（Offered even Falls）
960：170（g）．History of Soviet Russia－ 3 hrs．
Political，social，economic，and cultural developments of Russia in 20th century，emphasis on ideology．Prerequisite：junior standing．（Offere even Springs）
960：171（g）．History of Germany to 1648 － 3 hrs．
Unified German Empire and political，social，and religious forces whiclil undermined it from Middle Ages to end of Thirty Years War．Prerequisit junior standing．（Offered even Falls）
960：172（g）．History of Germany Since 1648 － 3 hrs ．
Political，social，economic，and cultural developments of Germany sinal the Peace of Westphalia，with emphasis on 19th and 20th centuries．Pre－ requisite：junior standing．（Variable）
960：173（g）．Russia to Peter I－ 3 hrs．
Survey of Russian political，social，economic，and cultural history from its origins to Peter the Great．Prerequisite：junior standing．（Offered odd Springs）
$960: 174(\mathrm{~g})$ ．History of Modern France－ 3 hrs ．
Survey of cultural，economic，and political history of France in 19th and 20th centuries．Prerequisite：junior standing．（Offered even Springs）
960：175（g）．Modern African History－ 3 hrs．
Survey of 19th－and 20th－century sub－Saharan Africa including economs
ic and social development, emergence of modern nationalist movements, and character of the European contact and its interaction with traditional African politics. Prerequisite: junior standing. (Variable)
960:176(g). Colonial Latin American History - 3 hrs.
Discovery, exploration, conquest, and development of Colonial Latin America. Prerequisite: junior standing. (Offered Fall)
960:177(g). History of the Caribbean - 3 hrs.
Major Caribbean countries, and the United States in the Caribbean, with emphasis on the 20th cenfury. Prerequisite: junior standing. (Variable)
960:178(g). Modern Middle East History - 3 hrs.
Middle East history from 1789 to present including Islamic roots, the rise of nationalism in various states, Arab attempts at unity, and the Arab-Israeli conflict. Prerequisite: junior standing. (Variable)
960:180(g). Latin American History - 3 hrs.
Modern development of Latin American states and their relations to the United States. Prerequisite: junior standing. (Offered Spring)
960:181(g). Pre-Modern South Asia - 3 hrs.
Culture and institutions within the Indian subcontinent from antiquity through Hindu and Islamic periods. Prerequisite: junior standing. (Offered Fall)

## 960:182(g). Modern South Asia - 3 hrs.

Influence of the West on cultures and institutions within the Indian subcontinent; response to changing conditions in the Anglo-Indian Empire; rise of movements leading to establishment of India and Pakistan. Prerequisite: junior standing. (Offered Spring)
960:183(g). Pre-Modern Chinese History - 3 hrs.
Cultural and institutional developments in China from earliest times to ca. 1800 A.D. Prerequisite: junior standing. (Offered Fall)
960:187(g). Modern Chinese History - 3 hrs.
Political, social, economic, and intellectual developments in China with special emphasis on period from the Revolution of 1911 to present. Prerequisite: junior standing. (Offered Spring)

## 960:188(g). Modern Central and Eastern Europe - 3 hrs.

History of Central and Eastern Europe from the $18^{\text {th }}$ to early $21^{\text {at }}$ century in a country-specific, regional, and comparative perspective. Employs a social history approach to examine the long-term development of societies, nations, and states in the region. Prerequisite: junior standing. (Offered Spring)

## 960:189. Readings in History - $1-3$ hrs.

Student will choose one of the following areas: (1) Ancient; (2) Medieval; (3) English; (4) French; (5) German; (6) Russian; (7) United States; (8) Latin American; or (9) Asian (India, China, and Japan). Prerequisite: consent of department head; for the field of U.S. History, 9 semester hours in U.S. History; for each of the other fields, 9 hours in history other than U.S., which must include 3 hours related to the particular field to be studied. (Offered Fall, Spring, and Summer)

## 960:192. Junior-Senior Seminar - 3 hrs.

May be repeated on different topics. For history majors; non-majors may enroll with consent of instructor. Prerequisite: junior standing. (Offered Fall and Spring)

## 960:193. Historians and Philosophy of History - 3 hrs.

Study of methodology and philosophy of history, illustrated by history of historical writing. Prerequisite: junior standing. (Variable)
960:198. Independent Study.
(Offered Fall, Spring, and Summer)
960:225. History and U.S. Public Policy - 3 hrs.
Use of history in policymaking; historical development of public policy in a specific area. (Offered Spring)
960:280. Seminar in History - 3 hrs.
Areas listed in Schedule of Classes. (Offered Fall and Spring)
960:285. Individual Readings - $\mathbf{1 - 3} \mathbf{~ h r s . ~}$
May be repeated. Prerequisite: consent of department head. (Offered Fall and Spring)

960:269. Seminar in United States Historiography - 3 hrs.
Seminar on major schools of interpretation of the American past, and specific examination of historiographical development of selected topics in American history. (Offered Spring)
960:290. Historical Methods - 3 hrs.
Investigation of problems confronting the historian and analysis of methods and techniques employed. (Offered Fall)
960:297. Practicum - 2 hrs.
(Offered Fall, Spring, and Summer)
96A:299. Research - 3 hrs.
Experience in use of bibliographical sources for scholarly research. Students will prepare literature reviews, abstracts, and outlines of their theses. Prerequisite: 960:290. (Offered Spring)
96B:299. Research - 3 hrs.
Thesis research. (Offered Fall, Spring, and Summer)

## 970 Geography

## 970:010. Human Geography - 3 hrs.

Interaction between peoples and their environments. Spatial patterns and processes of population distribution, characteristics, and movement, human environmental impact, and economic activity. (Offered Fall and Spring)
970:026. Physical Geography - $3-4$ hrs.
Explanation of patterns of solar energy receipt, atmospheric pressure, winds, and precipitation around the Earth. Emphasis on how solar energy, water, and crustal movements interact to determine characteristics of natural environments on Earth. Prerequisite: student must have satisfied university entrance requirements in English and Mathematics. (Offered Fall and Spring)

## 970:028. Environmental Change - 3 hrs.

Examination of the evidence for current global climate changes; study of evidence of global and regional climate changes of the last 12,000 years; analysis of possible causes of climate change. (Offered Fall)
970:040. World Geography - 3 hrs.
Reasons for and consequences of variations over surface of the earth of cultural, economic, physical, and other attributes of places. (Offered Fall, Spring, and Summer)

## 970:061. Maps and Map Interpretation - 3 hrs.

Survey of various types of maps available from perspective of map maker and user. Emphasis on reading, analysis, and interpretation of information on maps. (Offered Fall and Spring)

## 970:100. Environmental Geography - 3 hrs.

Study of geographic dimension of human-environmental interaction, Historical perspectives on Earth's environmental problems, the place of humankind in ecological systems, and issues of sustainable development. Prerequisite: 970:010 or 970:026 or 970:028 or 970:040 or consent of instructor. (Offered Spring)
970:101. Economic Geography - 3 hrs.
Analysis of changing spatial structure of the economy and inter-relationships between geography and economics within a global perspective. (Offered Fall)

## 970:104. North American Cities - 3 hrs.

Principles of urban geography, including urban growth and change, structure and dynamics, and analysis and planning in North American cities. (Offered odd Springs)
970:111(g). Cultural Geography - 3 hrs.
Examination of the nature and dynamics of culture relative to issues and landscapes that arise out of the interactions between people and their physical and human environments. Special emphasis on socio-economic development and the process of globalization. Prerequisite: junior standing. (Offered odd Springs)

## 970:114(g). Political Geography - 3 hrs.

Geographic factors in origin, development, behavior, and interaction of states. Prerequisite: junior standing. (Offered even Falls)
970:116 (g). Geopolitics - 3 hrs.
Classical and contemporary geopolitical theory; introduction to formal applications; and consideration of geopolitical goals of specific states. Prerequisites: one previous 100 -level course in social science; junior standing. (Offered odd Falls)

## 970:117(g). Transportation Planning and Policy - 3 hrs.

Transportation policy goals and objectives, transportation planning processes, characteristics and problems of transportation systems. Use of current methodologies and techniques to support decision making related to transportation policy, operations, and management. Prerequisite: junior standing. (Offered even Falls)

## 970:119(g). Population Geography - 3 hrs .

Patterns, processes, and models of population structure, change, distribution, and movement. Relationships with complex spatial mosaic of socioeconomic and environmental systems. Prerequisite: junior standing. (Offered even Falls)

## 970:121(g). Locational Analysis for Business - 3 hrs.

Practical and theoretical use of geographic models and concepts in business. Locational analysis, site selection, market area analysis, and real estate evaluation. Prerequisite: junior standing. (Offered odd Falls)
970:126(g). Geography of Soils - 3 hrs.
Study of soils as result of inter-relationships among climates, ecosystems, and landscapes of the world. Soil formation, distribution, properties, and classification, and applications of soil geography to other disciplines. Lecture, 2 periods; lab/field trips, 2 periods. Prerequisites: 870:031 or 970:026; junior standing. (Offered even Falls)

## 970:127(g). Climatalogy - 3 hrs.

Fundamentals of physical and dynamic climatology. Application of fundamentals to classification and mapping of global distribution of climatic types, and reconstruction of past climates. Prerequisite: junior standing.

## (Offered even Springs)

## 970:129(g). Rivers - 3 hrs.

Precipitation variability, floods, river channel morphology, floodplains and terraces, hillslope erosion, and effects of climatic changes and land use on rivers. Lecture, 2 periods; lab/field trips, 2 periods. Prerequisite: junior standing. (Offered even Falls)

## 970:137. Natural Hazards and Disasters - 3 hrs.

Examination of causes, physical processes, and geographic distribution of natural hazards. Discussion of prediction methods and social impact of such disasters. (Offered Spring)
970:141(g). Regional Geography - 3 hrs.
Study of geography of selected region including evolution and dynamics of its cultural, social, economic, political, and environmental dimensions. May be repeated on different regions. Prerequisite: junior standing. (Offered Fall and Spring)
970:142. Canadian Studies - 3 hrs .
Survey of the physical landscape, history, demographic patterns, cultures, and political/economic systems of Canada, including detailed examination of the country's regional geography and the challenges facing the nation's future. (Same as 900:135) (Offered odd Springs)
970:144. Natural Regions of North America - 3 hrs.
Description and explanation of various landforms of North America. Focus on structures and surface processes that form distinct physical regions of North America (e.g., Rocky Mountains), and kinds of landforms that make each region unique. (Offered odd Falls)
970:151(g). Historical Geography - 3 hrs.
Examination of geographic development of selected region or of significance of geographic factors in historical development of selected topic. May be repeated on different regions or topics. Prerequisite: junior stand-
ing. (Offered even Springs)
970:160(g). Spatial Data Analysis - 3 hrs.
Analysis and interpretation of spatial point processes, area, geostatistica and spatial interaction data. Applications to geographic data in real estate, biology, environmental and agricultural sciences using S-Plus softwarel Prerequisites: 800:072 or 980:080; junior standing. (Same as 800:171g. (Offered odd Springs)
970:163(g). Aerial Photo Interpretation and Photogrammetry - 3 hrs.
Emphasis on interpretation of physical and cultural phenomena on the earth's surface using imagery obtained through aerial photography. Basic principles of photogrammetry and introduction to non-photographef sensors. Lecture, 2 periods; lab, 2 periods. Prerequisite: junior standine (Offered Fall)

## 970:164. Geographic Information Systems I - 3 hrs.

Fundamental concepts and operations of Geographic Information Sysu tems with applications. Lectures are supplemented by computer-based projects. Lecture, 2 periods; lab 2 periods. (Offered Fall)
970:165(g). Thematic Cartography - 3 hrs.
Application of cartographic principles and techniques in compiling thematic maps. Emphasis on cartographic production; essentials of computer mapping and map reproduction. Lecture, 2 periods; lab, 2 periods| Prerequisite: junior standing. (Offered Spring)
970:168(g). Regional Analysis and Planning - 3 hrs.
Introduction to processes, methods, and techniques of regional analysis and planning. Planning seen as political and technical process. Prerequí sites: a statistics course; junior standing. (Variable)
970:171(g). Issues in the Teaching of Geography - 3 hrs.
Strategies and methods for teaching geography and incorporating geographic perspective in social studies courses. Prerequisite: junior standing. (Offered odd Falls)
970:173(g). Remote Sensing of the Environment - 3 hrs.
Examination of physical basis of Remote Sensing and various sensing systems available for monitoring, mapping, measuring, and identifyiad phenomena on the earth's surface. Emphasis on non-photographic systems operating within the electromagnetic continuum. Various modes of multispectral scanning. Lecture, 2 periods; lab, 2 periods. Prerequisite, junior standing. (Offered Fall)
970:174(g). Geographic Information Systems II - 3 hrs.
Technical issues in GIS and ways of implementing GIS as a decision support system for solving problems of a spatial nature in selected fields. Lecture, 2 periods; lab, 2 periods. Prerequisites: 970:164 or consent of instructor; junior standing. (Offered Spring)
970:175(g). Global Positioning System Field Survey Methods - 3 hrs.
Utilization of global positioning system (GPS) to collect, process, and analyze geographic data. GPS theory and techniques including field survey, experiences. Applications within an integrated geographic information system (GIS) framework. Prerequisite: junior standing. (Offered Fall)

## 970:177. Internship in Geography - 1-3 hrs.

Practical experience in business, industry, or a government agency. Mayy be repeated for maximum of 3 hours. Offered on credit/no credit basis only. Prerequisites: 15 hours of geography at UNI; cumulative GPA of 2.50; junior standing; consent of department. (Offered Fall, Spring, and Summer)
970:180. Senior Seminar in Geography - 3 hrs.
Examination of specific topics through application of geographic prin ciples and analysis. Capstone seminar. Research paper required. Prerequil| site: 21 hours of geography. (Offered Spring)

## 970:183(g). Satellite Image Processing - 3 hrs.

Scientific and computational foundation of digital image processing techniques for extraction of earth resources information from remotely sensed satellite data. Prerequisites: 970:173; junior standing. (Offered odd Springs)

## 970:189. Readings in Geography - 1-3 hrs.

Maximum of 3 hours can be applied toward Geography major. Prerequisite: consent of department head. (Offered Fall, Spring, and Summer) 970:190(g). Field Studies in Geography - 2-3 hrs.
Off-campus experience with preparatory and follow-up classroom study. Specific area to be studied, credit hours, and prerequisites listed in Schedule of Classes. May be repeated in different geographical areas for maximum of 6 hours. Prerequisite: junior standing. (Variable)
970:193. Research Experience in Geography - 1-3 hrs.
Conducting of supervised research or scholarly project. May be repeated for maximum of 6 hours. Prerequisites: 15 hours of geography; consent of instructor. (Offered Fall, Spring, and Summer)

## 970:202. Graduate Colloquium - 1 hr.

Weekly presentations by a faculty member, visitor, or student. May be repeated for maximum of 2 hours. (Offered Fall)
970:277. Internship in Geography - $\mathbf{1 . 3} \mathbf{~ h r s . ~}$
Practical experience in business, industry, or a government agency. May be repeated for maximum of 3 hours. Offered on credit/no credit basis only. Prerequisites: minimum of 9 hours of geography at UNI; graduate cumulative GPA of 3.00 ; consent of department. (Offered Fall, Spring, and Summer)
970:280. Seminar - 3 hrs.
Topics listed in Schedule of Classes. May be repeated on different topics. (Variable)
970:285. Readings in Geography - 1-3 hrs.
Prerequisite: consent of department head. (Offered Fall, Spring, and Summer)
970:294. Nature of Geography and Its Research Methodology - 3 hrs.
Analysis of various currents of thought concerning the nature and scope of geography and the way they have changed over time. Examination of various geographic research methodologies in the context of these philosophical issues. (Offered Fall)

## 970:298. Directed Research Project - 3 hrs.

Research leading to research paper for students in the non-thesis option. Prerequisite: 970:294. (Offered Fall, Spring, and Summer)
970:299. Research.
(Offered Fall, Spring, and Summer)

## 980 Sociology

## 980:001. Introduction to Sociology - 3 hrs.

Scientific approach to analysis and understanding of culture, human groups and institutions, personality, self, and social control. (Formerly 980:058) (Offered Fall and Spring)
980:022. Criminal Justice System - 3 hrs.
Genesis, transformation, and day-to-day operation of criminal justice within our society; emphasis on interrelationships between specific stages in the crime-control process and the differences between U.S. and other criminal justice systems. Prerequisites: 980:001; sophomore standing. (Offered Fall and Spring)

## 980:025. Criminology - 3 hrs.

Introduction to the study of criminal behavior, with emphasis on social science approaches. Overview of types of crime, and theories, methods and data used to study crime. Prerequisite: 980:001. (Offered Fall)
980:045. American Racial and Ethnic Minorities - 3 hrs.
Survey of several American minorities, including Hispanics, Blacks, Asians, and Native Americans. Multi-disciplinary study of these groups with particular emphasis on geographic origins, linguistic traditions, and current modes of economic subsistence. Introduction to follwways and mores of each group. (Same as 450:045 and 900:045) (Offered Fall and Spring)
980:060. Social Problems - 3 hrs.
Analysis of nature and range of social problems arising in modern indus-
trial society. Consideration given to conditions creating them and methods by which society seeks to cope with them. (Offered Fall and Spring) 980:070. Psychology and Law - 3 hrs.
Study of psychological theory and empirical research as it relates to the law. Topics include witness memory, suspect identification, lineup procedures, false confessions, lie detection, juror cognition, and jury decision making. Prerequisite: 400:001. (Same as 400:070) (Offered Fall and Spring)

## 980:080. Statistics for Social Research - 3 hrs.

Levels of measurement, frequency distributions, graphic representations, measures of average, measures of dispersion, cross-tabulation and measures of association, Pearson correlation, bivariate regression analysis, probability and hypothesis testing, inferences involving single sample and two samples, and analysis of variance. Prerequisite: completion of mathematics requirement for the Liberal Arts Core. (Offered Fall and Spring) 980:100 $/ \mathrm{g}$ ). Social Psjchology - 3 hrs.
Analysis of how people's thoughts, feelings, actions, and identities are influenced by social processes, interactions, and structures. Special attention to how people acquire, construct, and negotiate identities and how they are influenced by social realities of race, class, gender, and sexual orientation in these processes. Prerequisites: 980:001; junior standing. (Variable)
980:102. Conflict Resolution - $\mathbf{3} \mathbf{~ h r s}$.
Survey of social science theory and research in conflict resolution with emphasis on development of less destructive modes of problem solving in social formations. (Same as 450:102 and 990:102) (Variable)

## 980:105. Sociology of Families - 3 hrs.

Examination of social aspects of families by reviewing research on topics such as mate selection, marital quality, work and families, parenthood, divorce and remarriage, and family diversity. Prerequisites: 980:001; junior standing or consent of instructor. (Offered Fall)

## 980:108. Research Methods - 3 hrs.

Introduction to basic research methods used in social research. Conceptualization and operationalization of research problems. Examination of various research designs used to collect data. Introduction to sampling, instrumentation, data processing, data analysis, and report production. Prerequisite: 980:001. (Offered Fall and Spring)

## 980:111. The Rural Community - 3 hrs.

Rural peoples; their communities and social institutions; relationship between country and city; the tide of social change, its problems and promises; and world-wide perspective with special emphasis on United States. Prerequisites: 980:001; junior standing or consent of instructor. (Variable)

## 980:112. White Collar Crime - 3 hrs.

Examination of theoretical definition, social impact, and changing relationship between current technological advancements and society's ability to both detect and punish white collar criminals. (Offered Fall)
980:116(g). Correctional Treatment: Theory and Practice - 3 hrs.
Examination of evolution and development of correctional treatment in United States, with special attention to description and evaluation of programs in juvenile and adult corrections. Alternatives to rehabilitative ideal; students are expected to develop other treatment models. Prerequisites: 980:025 or 980:126; junior standing. (Offered Spring)
980:117. Community Corrections - 3 hrs .
Overview of sanctioning alternatives to imprisonment, including traditional probation and parole practices, as well as intermediate sanctions such as boot camps, electronic monitoring, fines, and intensive supervision. Sentencing will be discussed, as it influences probation/parole populations, as will the duties and responsibilities of probation and parole officers. Prerequisites: 980:001; 980:022; 980:126. (Variable)
980:119(g). Victimology - 3 hrs.
Sociological investigation of institutional, economic, family, and personal
victimization in American society with special attention to causes and processes of exploitation. Prerequisites: 980:001; junior standing. (Offered Fall)
980:121(g). Mental Deviance and Mental Health Institutions - 3 hrs .
Study of social factors associated with mental illness, its onset, the organizational context of its care and treatment, and its effects on various societal institutions. Prerequisites: 980:001 or 980:060; junior standing. (Same as $450: 121 \mathrm{~g}$ ) (Offered Fall and Spring)

## 980:122(g). Youth Gangs - 3 hrs.

Origins and development of youth gangs in United States. Topics include recent emergence of gangs, especially in lowa, relationship between drugs and violence and gang activity, and creation of social policy to prevent and control gang activity. Prerequisites: 980:001; junior standing. (Offered Spring)

## 980:123(g). Social Deviance and Control - 3 hrs.

Causes and consequences of socially-disapproved behavior; role of social control agencies in recruitment of deviant identities, management of and reaction to deviance; dynamics of labeling processes, and examination of social meaning of non-normative behavior. Prerequisites: 980:001; junior standing. (Offered Fall)

## $980: 124(\mathrm{~g})$. The Sociology of Policing - 3 hrs.

Sociological investigation of evolution and structure of policing in United States society, with special attention to conflicts and imperatives which define police officers' roles and character of police work. Prerequisites: 980:022; junior standing. (Offered Fall)
980:125(g). Social Gerontology - 3 hrs.
Personal, interpersonal, and societal factors in the human aging process; emphasis on family, community, and governmental responsibility in defining and resolving problems of the aged in modern industrial society. Prerequisites: 980:001; junior standing. (Offered Spring)
980:126(g). Corrections and Punishment - 3 hrs .
Punishment and correction in modern society, changing relationship between organization of society and-handling of criminal offenders; emphasis on character and functions of contemporary conditions, and alternative response to crime. Prerequisites: 980:022; junior standing. (Offered Fall and Spring)

## 980:127. Juvenile Delinquency - 3 hrs.

Types of juvenile delinquents, causes of delinquent behavior, social institutions and their effect upon delinquency, prevention, and control of delinquent behavior. Prerequisite: 980:001. (Offered Fall and Spring)
$980: 128(\mathrm{~g})$. The Sociology of Law - 3 hrs .
Sociological analysis of judicial and jury decision making, legal structures, legislation, power, beliefs, conflict, and social change. Examination of criminal, civil, and public law. Prerequisites: 980:001; junior standing. (Variable)

## 980:129(g). Comparative Criminology - 3 hrs.

Examination of criminology theory and practice in cross-cultural perspective. Prerequisites: 980:080; 980:123 or 980:127; junior standing. (Variable)

## 900:130(g). Minority Group Relations - 3 hrs.

Study of interpersonal and social relations of minority groups within the larger American society, with special reference to Black-White relations. Prerequisites: 980:001; junior standing. (Same as $450: 163 \mathrm{~g}$ ) (Offered Fall and Spring)

## 980:131(g). Women, Crime and Society - 3 hrs.

Sociological analysis of women as victims, offenders, practitioners, and professionals in the criminal justice system. Examination of changing perceptions and behaviors of women in United States and other countries in relation to role expectations of women in criminal justice system. Prerequisites: 980:022; junior standing. (Offered Fall)
980:132(g). Juvanila Justice - 3 hrs .
Examination of history, philosophies, and structure of juvenile justice
system. Discussion of issues confronting legislators, the judiciary, and juvenile justice personnel in context of the need to provide treatment and protection of individual rights and liberty. Prerequisites: 980:022; 980: 127; or consent of instructor; junior standing. (Offered Fall)

## 980:135(g). Social Inequality - 3 hrs.

Origin, development, and characteristics of systems of social inequal ity and stratification. Examination of class and caste systems, interactiond between varying classes and status groups, the effects of social mobility and theories of inequality. Prerequisites: 980:001; junior standing. (Offered) Spring)
980:138(g). Sociology of the Mass Media and Popular Culture - 3 hrs.
Social and economic constraints affecting production of variety of media and types of popular culture. Social use patterns and media effects on individuals and their social worlds. Special attention to portrayals of deviance. Prerequisites: 980:001 or 990:011; junior standing. (Offered Fall) 980:144(g). Population Studies - 3 hrs.
Comparative study of population composition, growth, and major trenda throughout the world with respect to fertility, migration, and mortality Introduction to techniques of population analysis, theories of popula, tion change, and problems of population policies. Prerequisites: 980:001 junior standing. (Variable)

## 980:145(g). Research Experience in Sociology - 1-3 hrs.

Research participation and/or independent supervised research. May be repeated for maximum of 6 hours. Prerequisites: 15 hours in sociolog/ including 980:080 and 980:108; junior standing; consent of instructom (Offered Fall, Spring, and Summer)

## $980: 148(\mathrm{~g})$. Environmental Sociology - 3 hrs .

Examination of issues of resource depletion and environmental degradar tion from socio-ecological perspective. Emphasis on interaction between these problems and patterns of social organization, and impacts of these problems on quality of life. Prerequisites: 980:001; junior standing (Offered Fall)

## 980:151(g). Crime and Social Inequality - 3 hrs.

Introduction and review of major issues and concepts in the study of crime; classical and positivist; discussion of psychological and sociologit| cal theories of criminal behavior, and recent empirical research on crime, in relationship to social inequality, particularly issues of social class, and racial/ethnic relations. Prerequisites: 980:001; junior standing. (Offered Fall)

## 980:152. Crime and Community - 3 hrs.

Exploration of the connection between community characteristics and crime. Students are presented with theories that address why some neighborhoods have concentrated crime and learn about what scholars, organizers, police, and politicians can do to reduce crime. Prerequisited 980:127. (Variable)

## 980:153(g). Crime and Public Policy - 3 hrs.

Analysis of public policy issues related to crime and justice. Focus on the design, implementation and evaluation of public policy responsey to criminal behavior. Prerequisites: 980:001; 980:022; junior standing| (Offered Fall)

## 980:156(g). Social Movements - 3 hrs.

Sociological and sociopsychological conceptualizations of the genesis, dynamics, and demise of modern social movements. Emphasis on reformist, utopian, nativistic, and totalitarian organizations. Prerequisites4 980:001; junior standing. (Variable)

## 980:160(g). Social Data Analysis - 3 hrs.

Intermediate methods of analysis using standing computer software program packages; descriptive and inferential statistics with controlled relationships, multivariate analysis, and scale analysis techniques. Primary orientation to survey data in social sciences. Prerequisites: 980:080 or equivalent; junior standing. (Offered Fall)

## 980:161(g). Multivariate Techniques for Social and Behavioral Research - 3 hrs .

Principles of path analysis, model testing, and problems in path analysis and causal inference; introduction to factor analysis (exploratory and confirmatory), standard operating procedure for interpretation of factors; cluster analysis; and discriminant analysis. Prerequisites: 980:160; junior standing. (Variable)

## 980:162(g). Politics, Law and Culture: Cross-Cultural Perspectives -

3 hrs.
Comparative approach to study of politics and law in sociocultural contexts. Consideration of political and legal institutions, systems, and processes based on case studies from selected cultures. Focus on traditional cultures. Prerequisites: 980:001 or 990:011; junior standing. (Same as 990:162g) (Variable)
980:165(g). Survey Research Methods - 3 hrs.
Introduction and application of methods used in survey research and public opinion polling. Emphasis on survey sampling, index and scale construction, questionnaire design, pre-testing, and report production. Prerequisites: 980:108; junior standing. (Same as $900: 165 \mathrm{~g}$ ) (Offered odd Springs)
980:167 (g). Gender in Cross-Cultural Perspective - 3 hrs .
Evolutionary, biological, psychological, cognitive, social, and cultural theories of gender and gender inequality evaluated with respect to crosscultural data. Prerequisites: 400:001 or 980:001 or 990:011; junior standing. (Same as $400: 167 \mathrm{~g}$ and 990:167g) (Offered odd springs)
980:168(g). Culture, Disease, and Healing - 3 hrs.
Introduction to medical anthropology through examination of the interactions among culture, disease, and healing. Emphasis on non-Western medical systems. Topics include development of medical anthropology; the social fabric of health; the cultural context of health, illness, and disease. Prerequisites: 980:001 of 990:011; junior standing. (Same as 990:168g) (Variable)
980:169(g). Drug Use and Abuse in Cross-Cultural Perspective - 3 hrs.
Biocultural approach to use of alcohol, hallucinogens, marijuana, opium, and other drugs in selected societies. Topics include relationships between drug-induced states and deviant behavior, socio-cultural factors and addictive states, criminalization of drug use in U.S., and implications of cross-cultural perspective for prevention and treatment of drug abuse. Prerequisites: 980:001 or 990:011; junior standing. (Same as 990:169g) (Variable)

## 980:170(g). The Development of Social Theories - 3 hrs .

Summary and critical appraisal of growth of sociological thought; historical consideration of social philosophy; introduction of leading sociological thinkers and their theories of society. Prerequisites: 980:001; junior standing. (Offered Fall and Spring)

## $980: 171(\mathrm{~g})$. Theories of Sex and Gender - 3 hrs.

Survey of theoretical approaches to study of sex and gender. Classical, structural, neo-Freudian, Marxist feminist, and radical approaches. Topics include work, family, religion, and sexuality. Prerequisites: 900:020 or 980:001 or 990:011; junior standing. (Offered Spring)

## 980:172(g). Sociology of Religion - 3 hrs.

Examination of social bases of religious institutions; factors in religious evolution and change; comparative analysis of religious organizations and religious behavior; functions of religion in the social structure. Prerequisites: 980:001; junior standing. (Offered Fall)

## 980:175(g). Theory and Criminal Justice - 3 hrs.

Analysis of crime and its effect upon society; examination of theoretical models undergirding prevention and control of criminal behavior; and model-building exercises on justice system. Prerequisites: senior standing or consent of instructor. (Offered Fall and Spring)
$980: 176(\mathrm{~g})$. Social Change - 3 hrs.
Nature of social change and its implications for personality and society.

Prerequisites: 980:001; junior standing. (Variable)

## $980: 177$. Language and Culture - 3 hrs .

Examination of how language use shapes and expresses cultural identity. Implications of linguistic diversity of world view, gender and ethnic identity, education, and cross-cultural communication. Prerequisite: 400:001 or 980:001 or 990:01 1. (Same as 400:177 and 990:177) (Offered Fall)
$980: 178(\mathrm{~g})$. Qualitative Research Methods - 3 hrs.
Development and application of qualitative descriptive and analytic methods used in social science research. Prerequisites: 980:001 or 990:011; junior standing. (Same as $990: 178 \mathrm{~g}$ ). (Offered Fall)
$980: 180(\mathrm{~g})$. Seminar in Sociology - 1-3 hrs.
Selected topics; opportunity to correlate previous course work and knowledge in field of sociology. Topic listed in Schedule of Classes. May be repeated for maximum of 6 hours. Prerequisites: 15 hours in sociology or consent of instructor; junior standing. (Variable)
$980: 181(\mathrm{~g})$. Seminar in Criminology - 3 hrs .
Selected topics; opportunity to focus previous course work and knowledge on a special issue in criminology. Topic listed in Schedule of Classes. May be repeated for maximum of 6 hours. Prerequisites: 15 hours in criminology; junior standing. (Offered Fall and Spring)
980:184 (g). Theory and Practice in Applied Settings - 1-6 hrs.
Experiential learning in sociology or criminology. Requires prior consultation with instructor. Offered on credit/no credit basis only. Prerequisites: 12 hours in sociology or criminology; junior standing. (Offered Fall, Spring, and Summer)

## 980:189(g). Readings in Sociology - $1-3$ hrs.

May be repeated only with consent of department. Prerequisites: 9 hours in sociology; junior standing; consent of department. (Offered Fall, Spring, and Summer)
980:193. Internship Seminar - 1 hr .
Process seminar to focus on and maximize student learning from their internship experiences and aid in their development of professional practices. May be repeated for maximum of 2 hours. Corerequisite: 31G:195 or 410:168 or 980:184. (Same as 31G:193 and 410:193) (Offered Fall, Spring, and Summer)

## 980:198. Independent Study

(Variable)

## 980:200. Contemporary Sociology Theory - 3 hrs.

Description and analysis of main currents in contemporary sociological thought; principal sociological theorists; major themes, schools, trends, issues, and debates in theory. Prerequisite: 980:170. Open to seniors with consent of department head. (Offered Spring)
980:201. Advanced Research Methodology - 3 hrs.
Relationship between theory and research, grand methodology; logic and philosophy of sociology; science and sociology; theory construction, formal models, explanation, prediction, and cause; value freedom, objectivity, and ideology. Prerequisite: 980:108. Open to seniors with consent of department head. (Offered Fall)
980:260. Quantitative Analysis - 3 hrs.
Familiarizes students with the process of: (1) forming research questions guided by theory; (2) quantitatively assess the validity of the research question; (3) interpret the results; and (4) present the research question and results in a research paper. Objective is to make students aware of how to do quantitative research and present it in a scholarly manner. Directed toward students in graduate school who desire to work in a research setting or with data. Can serve as a vehicle for the thesis. Prerequisite: Graduate standing or consent of instructor. (Offered Spring)
980:278. Qualitative Research: Data Collection and Analysis - 3 hrs.
Expands on the material covered in 980:178 and 990:178. Continues to introduce students to varied qualitative methods through lectures and activities. Requires more analysis of previous qualitative research and requires that graduate students prepare a research article based on their
findings as the final paper for the class. Prerequisite: Graduate standing or consent of instructor. (Offered Fall)
980:280. Seminar in Sociology - 3 hrs.
Topics include Sociological Theory, Deviant Behavior, Social Psychology, Social Stratification, Population, Sociological Research, Sociology of Religion, and others. Topic listed in Schedule of Classes. Advanced course in specific scheduled area will be considered a prerequisite to that seminar. May be repeated on different topics. (Variable)
980:285. Individual Readings - 1-3 hrs.
(Variable)
980:297. Practicum.
(Variable)
980:299. Research.
(Variable)

## 990 Anthropology

## 990:010. Human Origins - 3 hrs.

Introduction to physical and prehistoric development of humankind, including primate and human evolution, modern races, and the archaeological cultures of the world. (Offered Fall and Spring)
990:011. Culture, Nature, and Society - 3 hrs.
Introduction to cross-cultural perspective on human behavior. Consideration of the nature of society and culture among diverse human groups, from hunter-gatherers to industrialized city dwellers, by examination of their technologies, economic systems, family life, political structures, art, languages, and religious beliefs and practices. Emphasis on non-Western societies. (Offered Fall and Spring)
990:102. Conflict Resolution - 3 hrs .
Survey of social science theory and research in conflict resolution with emphasis on development of less destructive modes of problem solving in social formations. (Same as 450:102 and 980:102) (Variable)
990:125(g). Introduction to Museum Studies - 3 hrs.
Exploration of history, public mission, working environment, and ethical issues of museums. Discussion of practical skills and theoretical issues of museum studies, exposing students to broad range of museum types and career opportunities. Prerequisite: junior standing. (Same as 960:125g) (Offered even Springs)

## 990:132. Native North America - 3 hrs.

Ethnographic survey of sociocultural systems developed by Native Americans north of Mexico. Emphasis on relationships that exist among ecological factors, subsistence techniques, social organizations, and belief systems; and the impact interactions with European and U.S. societies had on Indian lifestyles. (Same as 680:132) (Variable)
990:137. Native Central and South America - 3 hrs.
Ethnographic survey of sociocultural systems developed by foraging and horticultural peoples of South America. Emphasis on relationships that exist among ecological factors, subsistence techniques, social organizations, and belief systems from holistic, comparative, and cross-cultural perspectives. (Same as 680:137) (Variable)

## 990:141. Mesoamerica and the Near East - 3 hrs.

Beginnings of food production, rise of complex culture and collapse of cultural systems as interpreted through archaeological data. Comparative approach focusing on Mesoamerica and the Near East. Prerequisites: 990:010; junior standing or consent of instructor. (Offered even Springs) 990:142. Archaeology of the New World - 3 hrs.
Prehistory of North American Indians and major prehistoric cultures in Central and South America, including the Aztec, Maya, and Inca, traced from earliest arrival of peoples in the New World to time of European contact. Prerequisites: 990:010; junior standing or consent of instructer. (Offered even Falls)
990:143. Archaeology of the Old World - 3 hrs.
Prehistory of Africa, Asia, Europe, and Australia from dawn of humanity
to civilizations of Egypt, Indus Valley, Mesopotamia, and China. Emphasis also on prehistory of simple hunter-gatherer cultures in the Old World. Prerequisite: 990:010; junior standing or consent of instructor, (Variable)

## 990:144. Prehistory of the American Southwest - 3 hrs.

Archaeological record of the American Indians of New Mexico, Arizonas southern Colorado, and southern Utah from earliest big-game hunters of the region, through development of agriculture, rise of large pueblos and cliff dwellings, and enigmatic abandonments prior to conquest by the Spaniards. Prerequisites: 990:010 or 990:011; junior standing. (Offered odd Springs)

## 990:145. Research Experience in Anthropology - 1-3 hrs.

Research participation and/or independent supervised research in anthropology. May be repeated for maximum of 6 hours. Prerequisites: 15 hours in anthropology; consent of instructor. (Offered Fall, Spring, and Summer)

## 990:148(g). Applied Anthropology - 3 hrs.

Consideration of application of anthropology in analyzing and address $T_{7}$ ing contemporary social problems. Topics include economic develop ${ }_{\psi}$ ment, public health, ethnic relations, and education. Prerequisites: 980: 001 or 990:011; junior standing. (Variable)

## 990:151. Physical Anthropology: History and Theory - 3 hrs.

Historical perspective on the development of evolutionary thought and how it changed ideas in physical anthropology, including the theoretical foundations of the "modern synthesis", the race concept, primate studies, paleoanthropology, and human ecology and adaptation. Prerequisited 990:010; junior standing; consent of instructor. (Offered Spring)

## 990:152 (g). Human Biological Variation - 3 hrs.

Exploration of the processes and origins of human biological variability adaptability, and responses to a changing environment. Prerequisitest 990:010; junior standing; consent of instructor. (Variable)

## 990:153. Primate Behavior - 3 hrs.

Examination of behavior and appearance of nonhuman primates in response to environmental and social factors. Investigation of how diet, reproduction, and social interaction among prosimians, monkeys, and apes act as a foundation for interpreting the origins of humans and their behaviors. Prerequisites: 990:010; junior standing or consent of instructor. (Variable)

## 990:155. Forensic Anthropology - 3 hrs.

Introduction to methods used in the recovery of unidentified human remains, their use in establishing identity, the post-mortem interval, pathological defects and traumatic insults and reconstructing the events surrounding death. Knowledge of the human skeletal anatomy preferred. Prerequisites: 990:010; junior standing; consent of instructor. (Offered Spring)
990:157(g). Ritual and Symbolism - 3 hrs.
Comparative approach to study of ritual in socio-cultural contexts. Consideration of psychological, sociological, and cultural interpretations of ritual symbolism based on case studies from selected non-Western cultures. Focus on rites of passage, reversal, and healing. Prerequisites 980:001 or 990:011; junior standing. (Variable)
990:158(g). Cross-Cultural Perspective on Mental IIIness - 3 hrs.
Cross-cultural approach to identification and treatment of mental disorders. Topics include (1) concepts of mental disorders and their relations to culture, (2) native and scientific etiologies of mental illness and their influence on diagnosis and treatment of deviant and abnormal behaviors, and (3) interaction of indigenous and Western therapeutic traditions. Prerequisites: 980:001 or 990:011; junior standing. (Variable)

## 990:160(g). Psychological Anthropology - 3 hrs.

Psychological dimensions of sociocultural systems considered from a cross-cultural perspective. Topics include historical development of the field; relationships between culture and personality; cognitive anthropol-
ogy; cultural variations in conceptions of self, sex roles and sexuality, mental disorders, and therapy; deviance and the socio-cultural context. Prerequisites: 990:011; junior standing. (Offered even Springs)
990:161. Religion, Magic, and Witcheraft - 3 hrs.
Anthropological understanding of behavior dealing with the supernatural; supernatural beliefs, practices, and movements throughout the world. Prerequisite: 990:011 or consent of instructor. (Same as 640:161) (Offered Spring)

## 990:162(g). Politics, Law and Culture: Cross-Cultural Perspectives 3 hrs.

Comparative approach to study of politics and law in sociocultural contexts. Consideration of political and legal institutions, systems, and processes based on case studies from selected cultures. Focus on traditional cultures. Prerequisites: 980:001 or 990:011; junior standing. (Same as $980: 162 \mathrm{~g}$ ) (Variable)

## 990:167(g). Gender in Cross-Cultural Perspective - 3 hrs.

Evolutionary, biological, psychological, cognitive, social, and cultural theories of gender and gender inequality evaluated with respect to crosscultural data. Prerequisites: 400:001 or 980:001 or 990:011; junior standing. (Same as 400:167g and 980:167g) (Offered odd springs)
990:168(g). Culture, Disease, and Healing - 3 hrs.
Introduction to medical anthropology through examination of the interactions among culture, disease, and healing. Emphasis on non-Western medical systems. Topics include development of medical anthropology; the social fabric of health; the cultural context of health, illness, and disease. Prerequisites: 980:001 or 990:011; junior standing. (Same as 980:168g) (Variable)

## 990:169(g). Drug Use and Abuse in Cross-Cultural Perspective - 3 hrs.

Biocultural approach to use of alcohol, hallucinogens, marijuana, opium, and other drugs in selected societies. Topics include relationships between drug-induced states and deviant behavior, socio-cultural factors and addictive states, criminalization of drug use in U.S., and implications of cross-cultural perspective for prevention and treatment of drug abuse. Prerequisites: 980:001 or 990:011; junior standing. (Same as 980:169g) (Variable)

## 990:171(g). Interpreting the Archaeological Record - 3 hrs.

Anthropological approaches to archaeology, including history of research; formation of archaeological record; research design, data collection, artifact analysis, classification, interpretation, dating, and inference. Prerequisites: 990:010; 990:011; 3 hours of 100-level archaeology or consent of instructor; junior standing. (Offered odd Falls)
990:172. Archaeological Fieldwork - 3-8 hrs.
Introduction to field research techniques (survey, excavation, and mapping), laboratory processing, and hypothesis testing. Conducted in the field. Prerequisites: 990:010; consent of instructor. (Offered odd Summers)
990:176(g). Anthropological Theory - 3 hrs .
Major theoretical developments in anthropology, including both historical and contemporary schools and trends. Prerequisites: 990:011; junior standing. (Offered Fall)

## 990:177. Language and Culture - 3 hrs.

Examination of how language use shapes and expresses cultural identity. Implications of linguistic diversity of world view, gender and ethnic identity, education, and cross-cultural communication. Prerequisite: 400:001 or 980:001 or 990:011. (Same as 400:177 and 980:177) (Offered Fall)

## 990:178(g). Qualitative Research Methods - 3 hrs.

Development and application of the qualitative descriptive and analytic methods used in social science research. Prerequisites: 980:001 or 990: 011 ; junior standing. (Same as $980: 178 \mathrm{~g}$ ) (Offered Fall)

## 990:180(g). Seminar in Anthropology - 3 hrs.

Selected problems within one subfield of anthropology (cultural, physical, archaeological, or anthropological linguistics). Topic listed in Sched-
ule of Classes. May be repeated. Prerequisites: vary with topic; junior standing. (Variable)
990:184. Experience in Applied Anthropology - 1-6 hrs.
Work experience in applied anthropology. Requires prior consultation with instructor. Offered on credit/no credit basis only. Prerequisites: 12 hours in anthropology; consent of instructor. (Variable)

## $990: 189(\mathrm{~g})$. Readings in Anthropology - 1-3 hrs.

May be repeated only with consent of department. Prerequisites: 9 hours in anthropology; junior standing; consent of department. (Variable)
990:198. Independent Study.
(Variable)

Officers of the Board:

John D. Forsyth, President

Des Moines
Robert N. Downer, President Pro Tem Iowa City

Gregory S. Nichols, Executive Director West Des Moines

Members of the Board:

Terms expire June 2005

Terms expire June 2007

Terms expire June 2009

David G. Neil, La Porte City Owen J. Newlin, Des Moines Dr. Deborah A. Turner, Des Moines

Dr. Amir I. Arbisser, Davenport Mary Ellen Becker, Oskaloosa Sue Erickson Nieland, Sioux City

Robert N. Downer, Iowa City Jenny L. Rokes, Cedar Falls John D. Forsyth, Des Moines

## Administrative and Professional Scientific Staff

## 2004-2006

## Officers of Administration

Robert D. Koob - B.A., University of Northern Iowa; Ph.D., University of Kansas
President of the University
Professor of Chemistry - 1995
"Aaron Mayer Podolefsky — B.A., California State University-San Jose; M.A., M.A., Ph.D., State University of New York-Stony Brook

Provost and Vice President - 1999
Professor of Anthropology - 1990
William D. Calhoun, Jr. - B.A., Hiram College, Ohio; M.A., University of Northern Iowa
Vice President for University Advancement/President, UNI Foundation — 1981 (1999)
Renee C. Romano - B.A., M.S.Ed., Southern Illinois UniversityCarbondale; Ph.D., Iowa State University
Vice President for Educational and Student Services - 1988 (1999)
Associate Professor of Educational Leadership, Counseling, and Postsecondary Education
Thomas G. Schellhardt - B.S., Southern Illinois University; M.S., Purdue University
Vice President for Administration and Finance - 2002
*Patricia L. Geadelmann - B.A., University of Northern Iowa; M.A., University of Iowa; M. Div., United Theological Seminary of the Twin Cities; Ed.D., University of North Carolina-Greensboro Special Assistant to the President for Board and Governmental Relations - 1996

Professor of Physical Education - 1972 (1984)

## Office of the President

Robert D. Koob - B.A., University of Northern Iowa; Ph.D., University of Kansas
President of the University
Professor of Chemistry - 1995
*Patricia L. Geadelmann - B.A., University of Northern Iowa; M.A., University of Iowa; M. Div., United Theological Seminary of the Twin Cities; Ed.D., University of North Carolina-Greensboro
Special Assistant to the President for Board and Governmental Relations - 1996

Professor of Physical Education - 1972 (1984)
Keith D. Saunders - B.A., University of Northern Iowa; J.D., University of Iowa
Associate Director of Governmental Relations - 1996 (2000)
Brenda C. Buzynski - B.A., M.A., University of Northern Iowa
Executive Assistant to the President - 1994 (2001)
Jane E. Larson - B.A., University of Northern Iowa
Administrative Assistant to the President — 1982 (1991)

## Office of Compliance and Equity Management

Leah K. M. Gutknecht - B.A., M.B.A., University of Northern Iowa Associate Director of Office of Compliance and Equity Management -1993 (2000)

## Office of Operations Auditor

Timothy J. McKenna - B.A., St. John's University, Collegeville, Minnesota; J.D., University of Minnesota Law School; CPA Operations Auditor - 1988
Carla S. Kelley - B.B.A., Iowa State University; CPA
Internal Auditor - 1992 (1997)

> A single date following the title indicates the beginning of service at this university. If two dates are given, the first indicates the incumbent's first appointment to a position and the second (in parentheses) the beginning of service in the present capacity.

[^13]
## Division of Instruction

## Division Administration

*Aaron Mayer Podolefsky - B.A., California State University-San Jose; M.A., M.A., Ph.D., State University of New York-Stony Brook

Provost and Vice President - 1999
Professor of Anthropology - 1990
Garrett A. Bozylinsky - B.A., Elizabethtown College; M.A., George Washington University
Associate Vice President for Information Technology - 1997
"Susan J. Koch - B.S., Dakota State College; M.A., Ed.D., University of Northern Iowa
Associate Provost and Associate Vice President for Academic Affairs - 2001

Professor of Health Promotion and Education - 1983 (2000)
"Timothy E. O'Connor - B.A., M.A., Creighton University; Ph.D., University of Minnesota
Assistant Vice President of Academic Affairs for International Programs - 1995

Professor of History - 1982 (1992)
James E. Bodensteiner - B.A., Loras College; M.A., Ed.S., University of Northern Iowa
Ed.D., Drake University
Interim Dean of the Division of Continuing Education and Special Programs - 2001
Director of Credit Programs - 1983
Jeffrey W. Cornett - B.6.Ed., Bowling Green State University; M.S.Ed., University of Toledo; Ph.D., Ohio State University
Dean of the College of Education - 2003
Professor of Education
Director of Teacher Education - 2004
"James F. Lubker - B.S., Mankato State; M.A., Ph.D., University of lowa
Dean of the College of Humanities and Fine Arts
Professor of Communicative Disorders - 1995
"Marilyn Mercado - B.A., Point Park College; M.L.S., University of Pittsburgh; M.A., University of Northern Iowa
Dean of Library Services - 2002
Associate Professor of Library Science - 1989 (1995)
"Farzad Moussavi - B.A., Institute of Advanced Accounting, Iran; D.A.S., Leeds Polytechnic, England; M.B.A., Roosevelt University; Ph.D., University of Arkansas
Dean of the College of Business Administration - 2003
Professor of Management (Organizational Behavior and Strategic Management) - 1985 (1997)
*John W. Somervill - B.A., Rhodes College; M.A., University of Mississippi; Ph.D., University of Arkansas
Dean of the Graduate College (1989)
Professor of Psychology — 1975 (1979)
*Julia E. Wallace - B.S., State University of New York-Oswego; M.A., State University of New York-Binghamton; M.S., University of Iowa; Ph.D., State University of New York-Binghamton
Dean of the College of Social and Behavioral Sciences - 2000
Professor of Psychology - 1978 (1989)
*Kichoon Yang - B.S., University of North Carolina; Ph.D., Washington University
Dean of the College of Natural Sciences
Professor of Mathematics - 2001

## Office of the Provost and Vice President

John D. Mixsell, Jr. - B.S., St. Lawrence University, New York; M.A., Webster University, Missouri
Academic Administrator Services Coordinator - 1979 (1998)
Patricia G. Woelber
Administrative Assistant - 1983 (20011)

## College of Business Administration

*Farzad Moussavi - B.A. Institute of Advanced Accounting, Iran; D.A.S., Leeds Polytechnic, England; M.B.A., Roosevelt University; Ph.D., University of Arkansas
Dean of the College of Business Administration - 2003
Professor of Management (Organizational Behavior and Strategic Management) - 1985 (1997)
"Leslie D. Wilson - B.S., Iowa State University; M.B.A., University of Northern Iowa; Ph.D., University of Iowa
Associate Dean of College of Business Administration - 2003
Associate Professor of Management (Management Information Systems) - 1985 (1997)
Linda A. Corbin - B.A., University of Northern Iowa
Coordinator of Undergraduate Programs for the College of Business Administration - 1981 (1984)
Jonathan Cox - B.A., University of Northern Iowa
Coordinator of Minority and Student Diversity Program for the College of Business Administration - 1995 (1998)
Kimm Frost - B.A., University of Utah
Academic Advisor for the College of Business Administration - 1984 (1996)

Bret Jacobsen - B.S., Buena Vista University
Computer Support Specialist for the College of Business Administration - 1997

Luann McAdams - B.A., University of Northern Iowa; M.A., University of Kentucky
Academic Advisor for the College of Business Administration - 1997 (2000)

## Business and Community Services Division

Kevin Hall - B.A., Ripon College
Systems Integrator, Business and Community Services - 1999

## Ag-Based Industrial Lubricants Research Program (ABIL)

*Lou A.T. Honary - B.S., College of Higher Technical Teacher Training, Babol, Iran; M.S., Mankato State University; D.I.T., University of Northern Iowa
Director, Ag-Based Industrial Lubricants Research Program, College of Business Administration Business and Community Services Division - 1982 (1999)
Patrick Johnston - B.A., University of Northern Iowa
Laboratory Technician, Ag-Based Industrial Lubricants Research Program, Business and Community Services Division - 2000
Diane I. Neuzil - B.A., Wartburg College
Associate Director, Ag-Based Industrial Lubricants Research Program, Business and Community Services Division - 1995 (2001)
Marjorie Epley Rover - B.A., M.A., University of Northern Iowa
Research Analyst, Ag-Based Industrial Lubricants Research Program, Business and Community Services Division - 1996 (1999)

## Institute for Decision Making (IDM)

Randal R. Pilkington - B.A., M.A., University of Northern lowa
Director of the Institute for Decision Making, Business and Community Services - 1987 (1990)
Executive Director of Business and Community Services - 1999
Interim Director of John Pappajohn Entrepreneurial Center - 2002
Cindy S. Angel - B.A., M.B.A., University of Northern lowa
Research Manager, Institute for Decision Making, Business and Community Services - 1984 (1990)
LaDene Bowen - B.A., Metropolitan State College-Denver, Colorado
Senior Project Manager, Institute for Decision Making, Business and Community Services - 1990
Donald G. Chaplain - B.A., Drake University
Senior Program Manager, Institute for Decision Making, Business and Community Services - 1992
Andrew P. Conrad - B.A., Marycrest College; M.P.P., University of Northern lowa
Program Manager, Institute for Decision Making, Business and Community Services - 1993 (1999)
James Hoelscher - B.A., M.P.P., University of Northern lowa
Program Associate, Institute for Decision Making, Business and Community Services - 1999
*William C. Wood II - A.B., Lenoir-Rhyne College; M.Div., Lutheran Theological Southern Seminary; M.E., Ph.D., University of Virginia
Program Manager, Institute for Decision Making, Business and Community Services - 1987 (1995)

Iowa Waste Reduction Center (IWRC)
John L. Konefes - B.S., Iowa State University; M.S., University of Massachusetts; M.S., University of Iowa
Director of the Iowa Waste Reduction Center - 1988
Diane J. Albertson - B.A., University of Northern lowa
Information Technology Specialist - 1990 (1999)
Sue K. Behrns - B.A., University of Northern Iowa
Waste Reduction Specialist - 1991
Jeff Beneke - B.S., University of Wisconsin-Platteville
Waste Reduction Specialist - 2001
Marci S. Carter - B.S., University of California-Los Angeles
Waste Reduction Specialist - 1994
Jason Ebensherger - B.A., University of Northern lowa
Program Assistant - 2003
Jeff England - B.S., University of Northern Iowa
Environmental Specialist - 1998 (2003)
Brian L. Gedlinske - B.S., Iowa State University; B.A., University of Northern lowa
Environmental Specialist - 1994
Christopher M. Horan - B.S., M.S., University of Northern Iowa
Program Manager - 1992
Lisa Hurban - B.S., B.S., Rutgers University
Waste Reduction Specialist - 1992
Chris Lampe - B.A., University of Northern Iowa
Waste Reduction Specialist - 1999
Daniel d. Nickey - B.S., Wesley College
Program Manager - 1994
James S. Olson - B.A., University of Northern Iowa; M.S., Southern Illinois University-Carbondale
Waste Management Specialist - 1989
Kristi Petersen - B.A. University of Northern Iowa
Waste Reduction Specialist - 2001
Carolyn Prins - B.A., B.A., M.A., University of Northern Iowa
Web site/Public Relations Manager - 2000 (2001)
Julie Reinitz - B.S., St. Ambrose University

Graphic Designer - 2000 (2002)
Sue Schauls - B.A., University of Northern Iowa
Program Manager - 1996 (2001)
Tim Trumbull - B.S., College of Charleston
Environmental Specialist - 1998 (2000)
Christine K. Twait - B.A., University of Northern Iowa; M.P.A., Iowa State University
Assistant Director - 1996 (1998)
John Whiting - A.A., Lake Superior College-Duluth, Minnesota
Waste Reduction Education Research Specialist - 1997
Bill Zimmerle - B.A., University of Northern lowa
Waste Reduction Specialist - 1997 (1998)

## John Pappajohn Entrepreneurial Center (JPEC)

Randal R. Pilkington - B.A., M.A., University of Northern lowa
Director of the Institute for Decision Making, Business and Community Services - 1987 (1990)
Executive Director of Business and Community Services - 1999
Interim Director of John Pappajohn Entrepreneurial Center, Business and Community Services - 2002
Katherine Cota-Uyar - B.A., University of Northern lowa
Program Manager, John Pappajohn Entrepreneurial Center, Business and Community Services - 1996 (1998)

## Management and Professional Development Center (MPDC) <br> Ronald A. Padavich - B.A., Northeast Missouri State University

Director of Management and Professional Development (1988)
Director of Strategic Marketing Services, Business and Community Services - 1988 (1991)
Debbie M. Vander-Arens - A.A., Grand View College; B.A., Wartburg College; M.A., University of Iowa; Ph.D., lowa State University
Program Manager, Management and Professional Development Center, Business and Community Services - 2003

## Small Business Development Center

Maureen Collins-Williams - B.A., University of Northern Iowa
Director, Small Business Development Center, Business and Community Services - 1997
Mike Hahn - A.A., North lowa Area Community College; B.A., University of Northern lowa
Program Manager, Outreach Services, Small Business Development Center, Business and Community Services - 2000
James Hoelscher - B.A., M.P.P., University of Northern lowa Program Manager, Small Business Development Center, Business and Community Services - 2004

## Strategic Marketing Services (SMS)

Ronald A. Padavich - B.A., Northeast Missouri State University
Director of Strategic Marketing Services, Business and Community Services - 1988 (1991)
Director of Management and Professional Development (1988)
Christy L. Bauer - B.A., University of Northern lowa
Program Associate, Strategic Marketing Services, Business and Community Services - 1998
Gregory P. Gerjerts - B.A., M.A., University of Northern Iowa
Senior Program Manager, Marketing/Market Research and Analysis, Strategic Marketing Services, Business and Community Services - 1993 (1994)

Sara Wulf - B.A., Wartburg College
Program Assistant, Strategic Marketing Services, Business and Community Services - 2001

## College of Education

*Jeffrey W. Cornett - B.S.Ed., Bowling Green State University; M.S.Ed., University of Toledo; Ph.D., Ohio State University

Dean of the College of Education - 2003
Professor of Education
Director of Teacher Education - 2004
*Sandra K. Alper - B.S., M.A.', Ph.D., University of lowa
Associate Dean for Graduate Studies and Sponsored Research, College of Education - 2004
Professor of Special Education - 1994
*William P. Callahan II - B.A., University of Southern Florida; M.A.T., Rollins College; Ed.D., University of Florida
Associate Dean for Undergraduate Education, College of Education - 2004

Professor of Special Education - 1979 (1989)
Interim Head of Department of Teaching - 2004

## Child Development Center

Jill M. Uhlenberg - B.A., M.A.E, M.A.E., University of Northern Iowa; Ph.D., University of Iowa
Assistant Professor of Teaching: Early Childhood Education - 2000
Coordinator of Child Development Center - 1989
Aimee M. Klostermann - B.A., University of Northern Iowa
Child Development Specialist - 2000 (2001)
Emily E. Knutson - B.A., University of Northern Iowa
Child Development Specialist - 2002
Mary L. McCarty - B.A., University of Northern Iowa
Child Development Specialist - 1993
Christina H. Olson - B.A., M.Ed., University of San Diego
Child Development Specialist - 1998 (1999)
Sheryl B. Pevelec - B.A., University of Northern Iowa
Child Development Specialist - 1999 (2000)
Jessica Schultz - B.A., University of Northern Iowa
Child Development Specialist - 2003
Candice L. York - B.A., M.A.E., University of Northern Iowa
Assistant Coordinator of Child Development Center - 1997 (2003)

## College of Education Advising Center

Jane Bentley-Gadow - B.A., Wartburg College; M.A.E., University of Northern lowa
Academic Advisor - 2002
Karen Silverson - B.A., M.A.E., University of Northern Iowa Academic Advisor - 1988

## Instructional Resources and Technology Services

Matthew A. Koliasch - B.A., M.A., University of Northern lowa Director - 1993
Neil Clopton - B.A., University of Northern Iowa
Information Technology Specialist - 1997 (1999)
Maxine Davis - B.A., Wartburg College
Resource Center Coordinator - 1989 (1991)

## School of Health, Physical Education, and Leisure Services <br> *Christopher R. Edginton - B.A., San Jose State University; M.S., University of Illinois; Ph.D., University of lowa <br> Director of the School of Health, Physical Education and Leisure Services - 1991 <br> Professor of Leisure Services

Susan R. Edginton - B.A., Laurier University; M.A., University of Oregon
Program Director, Camp Adventure ${ }^{T M}$ Youth Services - 1991 (2004)
Diane Enghretson - B.A., M.A., University of Northern Iowa
Assistant Director/Contract Operations, Camp Adventure ${ }^{T M}$ Youth Services - 1997 (2004)
Julianne Gassman - B.A., M.A., University of Norrthern Iowa
Associate Director, Camp Adventure ${ }^{T M}$ Youth Services - 2003
Welter R. Heinecke - B.A., University of Redlands; M.A., George Washington University
Director of International Marketing, Camp Adventure ${ }^{T M}$ Youth Services -1991 (2000)
Jason Lau - Diploma, Hong Kong Polytechnic University; B.A., M.A., University of Northern lowa
Assistant Director/Marketing and Contracts, Camp Adventiure ${ }^{\text {TM }}$ Youth Services - 2000 (2004)
Amber Lippincott B B.A., University of Northern Iowa
Program Assistant, Camp Adventure ${ }^{T M}$ Youth Services - 1998 (2000)
Gordon H. Mack - B.A., Southern University; M.A., New York University
Director, American Humanics - 1994
Clementine Mukeshimana B B.A., M.A., University of Northern lowa
Program Assistant, Global Health Corps - 1995 (2001)
Joseph Kwesi Ogah - B.Ed., University of Cape Coast, Ghana; M.A., University of Northern Iowa
Program Assistant, Global Health Corps - 1998 (2000)
Michaela Rich - B.S., M.A., University of Northern Iowa
Program Manager, Recycling and Reuse Technology Transfer Center - 1998 (2001)
"Donna J. Thompson - B.A.Ed., Western Washington University; M.A., Wheaton College; Ph.D., Ohio State University
Professor of Physical Education - 1975 (1998)
Director of National Program for Playground Safety - 1995
Annette R. Vander Werff - B.A., M.A., University of Northern Iowa
Co-Director, Global Health Corps

## Department of Special Education

*Martin Agran - B.A., City College of New York; M.A., University of Rochester; M.S., Western Oregon State College; Ph.D., University of Illinois-Urbana-Champaign
Interim Head of Department of Special Education - 2003
Professor of Special Education - 1999
Candace M. Sawyer - B.A., University of Ṇebraska; M.A.E., University of Northern Iowa
Administrator, Northern Iowa Instructional Center - 1991
Lora L. Hickman - B.A., University of Northern Iowa; M.A.E., University of Northern Iowa
Administrative Assistant Northern Iowa Instructional Center - 1995

## Department of Teaching

"William P. Callahan II - B.A., University of Southern Florida; M.A.T., Rollins College; Ed.D., University of Florida
Associate Dean for Undergraduate Education, College of Education - 2004

Professor of Special Education - 1979 (1989)
Interim Head of Department of Teaching - 2004
Mary Ann Brumm - B.A., Mount Mercy Colege
Program Assistant, Price Laboratory School - 2001
Douglas Case - B.A., University of Northern lowa
Information Technology Specialist, Price Laboratory SchooI - 1994 (2001)

Dorothea D. (Dody) Olson - B.S.N., Upper Iowa University; M.S.N., University of Minnesota
School Nurse, Price Laboratory School - 1987
Catherine Richey - B.A., University of Northern Iowa
Audio Video Production Specialist, Price Laboratory School - 2001
Mary L. Weber - B.A., University of Maryland; M.A., University of Northern Iowa
Librarian, Price Laboratory School - 1999

## College of Humanities and Fine Arts

*James F. Lubker - B.S., Mankato State; M.A., Ph.D., University of Iowa
Dean of the College of Humanities and Fine Arts
Professor of Communicative Disorders - 1995
*Reinhold K. Bubser - Abitur, Ziehen-Realgymnasium (Frankfurt); B.A., Western Michigan University; M.A., Ph.D., Michigan State University
Associate Dean of the College of Humanities and Fine Arts - 1996
Professor of German - 1982 (1984)
Christopher F. Conklin - B.A., University of Northern Iowa
Information Technology Specialist for the College of Humanities and Fine Arts - 2000
Paul A. Huber - B.A., Luther College; M.M., University of Northern Iowa
Information Technology Specialist for the College of Humanities and Fine Arts - 2000
Jerel J. Krueger - B.A., University of Northern Iowa
Program Assistant for the College of Humanities and Fine Arts - 2002
E. Charles Pugh - B.A., M.A., University of Northern Iowa

Assistant Technical Director for the College of Humanities and Fine Arts - 1988 (2003)

Kimberly D. Scott - B.S., Iowa State University
Program Assistant for the College of Humanities and Fine Arts - 2001

## Department of Art

*Stephen W. Taft - B.S.E., Central Missouri State University; M.A., Southwest Missouri State University; Ph.D., Texas Tech University
Acting Head of the Department of Art - 2004
Associate Professor of Theatre and Dance
Marc E. Moulton - B.A., Weber State College; M.F.A., Ohio State University
Shop Technician - 1989
Darrell Taylor - B.F.A., M.A., M.F.A., University of Iowa
Director, Gallery of Art - 2001 (2003)
Marie Woodard - A.A., Lansing College; B.A., M.A., Michigan State University
Visual Resources Curator - 2000

## Broadcasting Services

John S. Hess - B.A., University of Iowa
Director of Broadcasting Services - 2000
Jeneane Brewer - B.A., Iowa State University
Des Moines Bureau Chief - 1999
Robert K. Dorr - B.A., University of Northern Iowa
Announcer - 1974 (1985)
Jacqueline C. Halbloom - B.M., Cornell College; M.M., University of Oregon
Senior Producer/Fine Arts - 1999
David E. Hays - A.A., North Iowa Area Community College; A.A.S., Iowa Central Community College
Public Information Coordinator - 1979 (1985)

Karen L. Impola - B.A., Swarthmore College
Senior Producer, Folk - 1990
Wayne N. Jarvis - B.A., University of Northern Iowa
Interim Program Director - 1973 (2002)
Phil Maass - B.A., Oberlin College
Radio Events Producer - 1995
Patricia Olthoff-Blank - A.A., Iowa Lakes Community College; B.A., University of Northern Iowa
Producer/Announcer, News - 1986 (1995)
Catherine Orth - B.A., University of Northern Iowa
Development Associate - 1997
Rebecca Reedy - B.A., University of Iowa
Development Associate - 2002
Allen T. Schares - B.A., University of Northern Iowa
Music Coordinator/Producer - 1983 (1990)
Steven L. Schoon - A.A.S., Cleveland Institute of Technology
Assistant Director/Technical Operations - 1986 (1997)
Erica Schultz - B.A., University of Wisconsin-Stevens Point
Membership Manager - 2003
Gregory B. Shanley - B.S., Ohio University
Senior Producer/News Director - 1986 (1990)
Mark A. Simmet - B.A., St. John's University
Announcer - 1987
Leonard R. Tomkins - A.A.S., Hawkeye Institute of Technology
Broadcast Engineer - 1988

## Department of Communicative Disorders

Therese A. Kouri - B.A., M.A., University of Northern lowa; Ph.D., Kent State University
Instructor and Director of Speech Language Hearing Clinic - 1991

## School of Music

*John F. Vallentine - B.M.E., Southeast Missouri State University; M.M., University of Northern Iowa; Ph.D., University of Kentucky Director of the School of Music - 1999
Associate Professor of Bands - 1991 (1999)
Cathy R. Craig - B.A., University of Northern Iowa
Suzuki Coordinator - 1987 (2002)

## Department of Theatre

*Eric R. Lange - B.A., Trinity University; M.F.A., Temple University Acting Head of Department of Theatre - 2003
Associate Professor of Theatre and Technical Director - 1995 (2001)
Jasceana Haislet-Carlson - B.F.A.,Wright State; M.F.A., Wayne State
Marketing Director/Theatre Publicist - 1995 (1997)
Mark A. Parrott - B.A., Graceland College; M.S., Central Missouri State University; M.F.A., Southern Illinois University-Carbondale Designer/Instructor — 1997

## College of Natural Sciences

*Kichoon Yang - B.S., University of North Carolina; Ph.D., Washington University
Dean of the College of Natural Sciences - 2001
Professor of Mathematics - 2001
*Jill M. Trainer - B.A., University of California-Berkley; M.S., Ph.D., University of Michigan
Interim Associate Dean of the College of Natural Sciences - 2003
Professor of Biology — 1989 (2002)
Heather L. Bremer-Miller - B.A., University of Iowa
Director of Development/College of Natural Sciences and College of Social and Behavioral Sciences - 2000
Cheryl R. Smith - B.A., University of Wisconsin-Madison
Program Associate, UNI Iowa Space Grant Consortium - 1992

Aaron P. Thompson - B.S., University of Northern Iowa
UNIX Systems Administrator - 2001

## Department of Biology

*Barbara A. Hetrick - B.A., Ohio Wesleyan University; M.S., Washington State University; Ph.D., Oregon State University
Head of the Department of Biology - 1994
Professor of Biology

## Billie A. Hemmer-Callahan

Biology Greenhouse and Preserves Assistant - 1997
Sherry L. Nuss - B.S., Oklahoma State University; M.A., M.A., University of Northern Iowa
Biology Academic Advisor - 1998

## College of Social and Behavioral Sciences

*Julia E. Wallace - B.S., State University of New York-Oswego; M.A., State University of New York-Binghamton; M.S., University of Iowa; Ph.D., State University of New York-Binghamton
Dean of the College of Social and Behavioral Sciences - 2000
Professor of Psychology - 1978 (1989)
*Phyllis L. Baker - B.A., San Diego State University; M.A., Ph.D., University of California-San Diego
Associate Dean of the College of Social and Behavioral Sciences - 1999
Associate Professor of Sociology - 1990 (1997)
Heather L. Bremer-Miller - B.A., University of Iowa
Director of Development/College of Natural Sciences and College of Social and Behavioral Sciences - 2000
Mark A. Dobie - B.A., M.A., University of Northern Iowa
Information Technology Specialist/PC Support - 1997 (2003)
Kristine K. Franzen - B.A., Wartburg College, M.A., University of Northern Iowa
Assistant Coordinator of Scholarships and Development - 2003
Thomas M. Turner - B.A., University of Northern Iowa
Information Technology Specialist - 1995 (1996)

## Department of Social Work

Carol Cook-Roherts - B.A., University of Northern Iowa; M.S.W., University of Iowa
Director of Field Instruction - 2001

## Continuing Education and Special Programs

James E. Bodensteiner - B.A., Loras College; M.A., Ed.S., University of Northern Iowa; Ed.D., Drake University
Interim Dean of the Division of Continuing Education and Special Programs - 2001
Director of Credit Programs - 1983
Jennifer L. Colsch - B.A., University of Northern Iowa
Coordinator of Marketing and Promotions - 1999
Michael L. Savage - B.A., Baldwin-Wallace College; B.A., University of Northern Iowa
Information Technology Specialist - 1995

## Credit Programs

James E. Bodensteiner - B.A., Loras College; M.A., Ed.S., University of Northern Iowa; Ed.D., Drake University
Interim Dean of the Division of Continuing Education and Special Programs - 2001
Director of Credit Programs - 1983

Kent M. Johnson - B.A., M.A., University of Northern Iowa
Associate Director of Credit Programs - 1993
Isabelle D. Cowden - B.S., University of Wisconsin-Platteville; B.A.,
Coe College; M.A., University of Northern Iowa
Instructional Developer, Credit Programs - 1998
Michelle Holland - B.A., M.A.E., University of Northern Iowa
ICN Scheduler/Bachelor of Liberal Studies Coordinator - 1998 (2001)

## Individual Studies Program

Karen Cunningham - B.A., M.A., University of Northern Iowa
Coordinator Individual Studies Program — 1999 (2003)

## Conference and Event Services

Duane H. McDonald - B.A., University of Missouri-Kansas City; M.Ed., University of Missouri-Columbia

Director, Conference and Event Services - 1986
Jennifer S. Yarrow - B.A., University of Northern Iowa
Associate Director, Conference and Event Services - 1997
Sarah J. Vit - B.A., University of Northern Iowa
Conference Coordinator, Conference and Event Services - 2002

## Graduate College

*John W. Somervill - B.A., Rhodes College; M.A., University of Mississippi; Ph.D., University of Arkansas
Dean of the Graduate College
Professor of Psychology - 1975 (1988)
*Jacqueline McGlade - B.A., M.A., University of Nebraska; Ph.D., The George Washington University
Associate Dean for Graduate Academic Affairs, Graduate College
Associate Professor of History - 2003
David A. Walker - B.S., Missouri Valley College; M.A., Louisiana State University; Ph.D., University of Wisconsin-Madison
Associate Dean for Faculty Scholarship, Graduate College
Professor of History - 1975 (1989)
Edward M. Ebert - B.A., M.A., University of Northern Iowa
Grants and Contracts Administrator - 1977 (1985).
Michele A. Mullings - Shand - B.S., University of the West Indies; M.S., Purdue University

Assistant Grants.and Contracts Administrator - 1994 (2000)

## Educational Opportunity Programs and Special Community Services

Joyce M. Bennett - B.A., Wartburg College
Program Assistant for Educational Opportunity Programs and Special Community Services - 2002.
Isaac A. Podolefsky - B.A., University of Northern Iowa
Instructional Technology Specialist, Educational Opportunity Programs and Special Community Services - 2002
LyAnn Western - B.A., University of Iowa; M.A., University of Northern Iowa
Retention Specialist, Educational Opportunity Programs and Special Community Services - 2002 (2003)

## Center for Academic Achievement

Kathleen M. Peters - B.A., M.A.E., University of Northern Iowa Director, Center for Academic Achievement - 1982 (1994)
Deanne R. Gute - B.A., M.A., University of Northern Iowa Writing Specialist, Center for Academic Achievement - 1997
John J. Neely - B.A., M.A., University of Northern lowa
Math Specialist, Center for Academic Achievement - 2003

Lori A. VanHooreweghe - B.A., M.A.E., University of Northern Iowa Academic Advisor, Center for Academic Achievement - 1998 (1999)

## Classic Upward Bound Program

Wilfred M. Johnson - B.A., M.A.E., University of Northern Iowa Director, Classic Upward Bound - 1989 (1994)
Amanda L. Graeber - B.A., M.A., University of Northern Iowa Program Assistant, Classic Upward Bound - 2003
Nancy J. LeMont - B.A., University of Northern Iowa
Academic Coordinator/Counselor, Classic Upward Bound - 1995 (1999)

## Educational Opportunity Center

Robert L. Smith, Jr. - B.A., University of Iowa
Director, Educational Opportunity Center - 1988 (1991)
Rachel L. Phillips - B.S., Drake University
Assistant Director, Educational Opportunity Center - 1990 (1991)
Tina L. Anderson - A.A., North Iowa Area Community College; A.A, Hamilton Business College; B.A., University of Northern Iowa
Educational Counselor, Educational Opportunity Center - 2001
Julie A. Luck - A.A., University of North Dakota; B.S., Park College
Educational Counselor, Educational Opportunity Center - 2001
Kathy S. Martin - B.A., University of Northern Iowa
Senior Educational Counselor, Educational Opportunity Center - 1996 (2003)

Laura M. Nash - B.A., Talledega College
Educational Counselor, Educational Opportunity Center - 2001

## Educational Talent Search Program

Anthony Stevens - B.A., Wartburg College; M.A., University of Northern Iowa
Director, Educational Talent Search Program - 1972 (1985)
Clifford E. Coney - B.A., University of Northern Iowa
Senior Counselor, Educational Talent Search Program - 1987 (1993)
Youlanda R. Robinson - B.A., University of Northern Iowa
Recruiter/Advisor, Educational Talent Search Program - 2003
Byron S. Washington - B.A., University of Northern Iowa
Program Assistant, Educational Talent Search Program - 2003

## Gear Up Program

Shirley D. Greer - B.A., M.B.A., Upper Iowa University Director, Gear Up Program - 2003
Marnie L. Wright - B.A., Western Illinois University
Program Site Coordinator, Gear Up Program - 2004

## Ronald E. McNair Program

Dennis M. Irons - B.A., Wittenberg University; M.A., Ph.D., Texas Christian University
Director of McNair Scholar Program - 1996 (2003)
Dora Lekisha Raine - B.A., Cookman College; M.A., University of Northern Iowa
Program Assistant, McNair Scholars Program - 2002

## Student Support Services

Inez M. Murtha - B.A., M.A., University of Northern Iowa
Director, Student Support Services - 1969 (1994)
JoAnn Anderson-Wright - B.A., Luther College
Academic Support Specialist, Student Support Services - 1979 (1999)
Nicholas D. Sullivan - B.A., University of Northern Iowa
Coordinator of Instructional Services, Student Support Services - 1996 (2000)

## UNI Center for Urban Education (UNI-CUE) <br> Karen K. McNeil - B.S.Ed., Lincoln University; M.A., University of Northern lowa

Director, UNI Center for Urban Education (UNI-CUE) - 1981 (2003)

## Upward Bound Math and Science Center

Reygan M. Freeney - B.S., M.A., University of Northern Iowa
Director, Upward Bound Math and Science Program - 1999 (2000)
Angela M. Weekley - B.A., Wartburg College
Academic Advisor, Upward Bound Math and Science Program - 1999

## Information Technology Services

## Administration

Garrett A. Bozylinsky - B.A., Elizabethtown College; M.A., George Washington University
Associate Vice President for Information Technology - 1997
Karen S. Paulsen - A.A.S., Kirkwood Community College
Business Manager - 1990 (2001)

## ITS Educational Technology

Marilyn Drury - B.A., University of Northern Iowa; M.A., Truman State University
Director, Educational Technology - 1999
Jordon Dierks - B.S., Upper Iowa University; M.A., University of Northern Iowa
Learning Management Systems Administrator - 2001
Doreen Hayek - B.A., M.B.A., University of Northern Iowa
Projects Administrator - 1984 (1995)
Todd Hayungs - A.A., Hawkeye Community College
Educational Technology Engineer - 1994
Sandra J. Hendrickson - B.A., M.A., University of Northern Iowa
Coordinator of Digital Design - 1984 (2003)
Philip Hibbard - A.A., North Iowa Area Community College; B.S., Iowa State University; M.S., University of Northern Colorado; Ed.D., University of Northern Iowa
Educational Technology Specialist - 1991 (1994)
Joseph J. Marchesani - B.A., Fordham University; M.S., Brooklyn College; M.Ed.,Temple University
Coordinator of Audio and Video Services - 1972
Assistant Professor of Education
Dennis B. Reimer - B.A., M.A., University of Northern Iowa
Coordinator of Multimedia Distribution - 1967 (1993)
Lori Seawel - B.A., M.A., M.A., University of Northern Iowa
Educational Technology Specialist - 2000
Rick Seeley - B.A., University of Northern Iowa
Instructional Technology Research and Development Manager - 1995 (1997)

Charles Sengstock - B.A., Iowa Wesleyan College; M.A., University of Northern Iowa
Manager of Multimedia Production - 2000
Jason Vetter - B.A., Luther College; M.A., University of Northern Iowa
Educational Technology Specialist - 1999

## ITS Information Systems

Dennis R. Lindner - B.A., Wartburg College
Director, Information Systems - 1978 (1989)
Melanie L. Abbas - B.A., M.S., University of Northern Iowa
Oracle Application Administrator - 1992 (1999)
Emily A. Cahalan - B.A., University of Northern Iowa
Programmer Analyst — 2000

Troy Bull - B.S., Iowa State University; M.S., University of Northern Iowa
Data Access Systems - 1996 (2002)
Jeremy M. Fangmann - B.A., University of Northern Iowa Assistant Database Administrator - 2000 (2001)
Regeana Fisher -.A.A.S., Kirkwood Community College
Systems Analyst - 1993 (2002)
Kevan E. Forest - B.A., Clarke College
Data Base Administrator - 1998
Erik J. Guetzlaff - B.A., University of Northern Iowa
Programmer Analyst - 2000
Julie Heiple - B.A., University of Northern Iowa
Data Access Administrator - 1979 (1996)
Dennis Johnson - B.M., B.A., University of Northern Iowa
Systems Analyst — 1994 (2002)
Holly Jongedyk - B.S., University of Iowa
Programmer Analyst - 1999
Connie Ketterer - B.A., University of Northern Iowa
Systems Analyst - 1992 (1995)
Galina Lerner - B.S., University of Moscow, U.S.S.R.
Programmer Analyst - 1997
Monica Mundhenke - A.S., Southeastern Iowa Community College; B.A., University of Northern Iowa

Information Systems Manager - 1986 (1997)

## Patricia J. Palmersheim

Assistant Data Base Administrator - 1971 (2000)
Kevin R. Quarnstrom - A.A., Boone Junior College; B.A., M.B.A., University of Northern Iowa
Information Systems Manager - 1979 (1985)
Laura Richter - B.A., M.A., University of Northern Iowa
Systems Analyst - 1993
Gary R. Rogers - A.A.S., Hawkeye Community College
Assistant Application Administrator - 2001
Patricia L. Rooff - B.A., Regis College
Systems Analyst - 1999 (2003)
Mark Schauls - B.A., University of Northern Iowa
Assistant Application Administrator - 1996 (2001)
Yayoi Teramoto Moreland -A.A., Tokyo University Junior College, Japan; B.A., Coe College; M.A., University of Northern Iowa
Programmer Analyst - 1998
Valerie I. Turner - B.S., Iowa State University; M.S., University of Northern Iowa
Programmer Analyst - 1999
Mary C. Westendorf - B.A., University of Northern Iowa
Systems Analyst - 1988 (1995)
Chad M. Wittrock - B.A., University of Northern Iowa
Programmer Analyst — 2001

## ITS Network Services

Steven Y. Moon - B.A., University of Northern Iowa; M.S., University of Iowa
Director, Network Services - 1979 (1989)
Seth Bokelman - B.S., Iowa State University
Systems Administrator - 1999 (2003)

## Barbara Charley

Operations Coordinator - 1987 (2002)
Kenneth D. Connelly - B.A., B.A., University of Northern Iowa
Systems/Operations Manager - 1983 (1989)
Sharon Drachenberg
Telecommunications Specialist - 1990 (1998)
Roberta L. Fox - B.A., University of Northern Iowa
Assistant Operations Coordinator - 1976 (2003) .

## Randy Hayes

Voice Service Manager - 1996
Robert W. Hetrick - A.A., Pennsylvania State University; B.S., University of Wyoming
Computer Netwo rk Manager - 1994 (2002)
Aaron Howard - B.S., University of Northern Iowa
Senior System Administrator - 2001 (2003)
Judy Schultz - Diploma, Kirkwood Community College; B.A., Wartburg College
Senior Systems Programmer - 1996
Jon R. Wolter - A.A.S., Hawkeye Institute of Technology .
Field Service Managet - 1984 (1989)
Peter Yezek -Thompson - A.A., North Iowa Area Community College; B.A., University of Northern Iowa

UNIX System Administrator - 1992
Keith Young - B.A., University of Northern Iowa
UNIX System Administrator - 1997

## ITS User Services

Thomas C. Peterson - A.A., Boone Junior College; B.S., Iowa State University
Director, User Services - 1982 (1989)
Sandra Brasch - B.A., M.A., University of Northern Iowa
Support Services Coordinator - 1998
Jack Miller - B.S., Belknap College, New Hampshire; M.A., Webster University
Consulting Center Manager - 1992
Tony Paige - A.A.S./E.E.T., DeVry Institute
PC Support Coordinator - 2000
Dana L. Peiffer - A.A., DeVry Institute of Technology
PC Support Coordinator - 1999
Diane C. Sullivan - B.A., University of Northern Iowa
Support Services Manager — 1980 (1994)

## Office of Information Management and Analysis

C. R. Thulasi Kumar - B.Tech., S.V. University, India; M.E., Anna University, India; Ph.D., University of Delaware
Director of Information Management and Analysis - 2000
Kristin Moser - B.A., University of Northern Iowa
Research Analyst - 2002

## Office of International Programs

*Timothy E. O'Connor - B.A., M.A., Creighton University; Ph.D., University of Minnesota
Assistant Vice President of Academic Affairs for International Programs - 1995

Professor of History - 1982 (1992)
Holly J. Crandall - A.B., University of New York-Rochester; M.A., University of Northern Iowa
Russian Program Administrator - 1997
Robert A. Pesek - B.A., Miami University, Ohio; M.S., Indiana University; Ph.D., University of Toledo
Director of Culture and Intensive English Program - 2000
Philip D. Plourde - B.A., Western New England University; M.A., Ohio University
Académic Support Specialist - 2000
Instructor, Culture and Intensive English Program - 1997

Thomas F. Riedmiller - B.A., Cornell College; M.A., Radford University
Academic Support Specialist - 2000
Instructor, Culture and Intensive English Program - 1994
Ella A. Sweigert - B.A., Janus Pannonius University, Hungary; M.A., University of Northern Iowa
Study Abroad Program Coordinator - 1999

## University Lilbrary

*Marilyn Mercado - B.A., Point Park College; M.L.S., University of Pittsburgh; M.A., University of Northern Iowa
Dean of Library Services - 2002
Associate Professor of Library Science — 1989 (1995)
Ken A. H. Bauer - B.A., University of Northern Iowa
Information Technology Specialist, Library - 1976 (2000)
Nancy J. Hasenwinkel - B.A., M.A., University of Northern Iowa Library Associate, Acquisitions - 1993
David D. Hoing - B.A., University of Northern Iowa
Library Associate, Access Services - 1986
Linda L. McLaury - B.A., M.A., University of Northern Iowa
Library Associate, Access Services - 2001
Rosemary R. Meany - B.A., University of Northern Iowa
Library Associate, Access Services - 1980 (1994)
Sandra R. Warner - B.A., Western Illinois University
Library Associate, Acquisitions - 1981

## Department of Military Science

Robert P. Stavnes - B.S., University of Iowa; M.A., Central Michigan University
Lieutenant Colonel and Head of the Department of Military Science - 2002

Ronald L. Albrecht - B.A., University of Northern Iowa
Lieutenant Colonel and Assistant Professor of Military Science - 2000
Keith J. Lostroh - B.A., University of Nebraska-Lincoln
Major and Assistant Professor of Military Science - 2000

## Museums and Collections

Sue E. Grosholl - B.A., University of Illinois-Urbana; M.A., Ph.D., University of Wisconsin-Madison
Director, Museum - 1992
Adjunct Professor of Anthropology
Edith Blanchard - B.S., Iowa State University; M.A., Texas Tech University-Lubbock
Collections Manager - 2002
Diane Schupbach - B.A., Doane College, Nebraska
Education Coordinator - 2002
Kay Thuesen - B.S., Western Illinois University
Public Affairs Coordinator - 1997

## North American Review

*Vince F. Gotera - B.A., Stanford University; M.A., San Francisco State University; M.F.A., Ph.D., Indiana University
Associate Professor of English - 1995 (1997)
Editor, North American Review - 2000
*Grant A. G. Tracey - B.A., Trent University, Ontario; M.A., Kansas State University; Ph.D., University of Illinois, Urbana-Champaign
Assistant Professor of English - 1996
Editor, North American Review - 2000

## Women's Studies Program

*Cynthia A. Goatley - B.A., M.A., University of Arkansas; Ph.D., Bowling Green State University
Associate Professor of Theatre - 1991 (1994)
Director of Graduate Women's Studies Program (2001)
"Susan E. Hill - B.A., Macalester College; M.A., Ph.D., University of Chicago
Associate Professor of Religion - 1994 (2000)
Director of Undergraduate Women's Studies Program - 2001

## Division of Educational and Student Services

## Division Administration

Renee C. Romano - B.A., M.S.Ed., Southern Illinois UniversityCarbondale; Ph:D., Iowa State University
Vice President for Educational and Student Services - 1988 (1999)
Associate Professor of Educational Leadership, Counseling, and Postsecondary Education
Edgar L. Berry - B.A., St. Augustine's College-Raleigh, North Carolina; M.A., Clark Atlanta University, Georgia; Ed.D., Texas Southern University-Houston
Associate Vice President/Dean of Students - 2004

## Office of the Vice President for Educational and Student Services

Samuel L. Barr - B.A., Simpson College; M.A., University of Northern Iowa
Information Technology Coordinator for Educational and Student Services Division - 1985 (2000)
Carol A. Geiger - B,A., University of Northern Iowa
Administrative Assistant - 1985 (1991)
*Geraldine Perreault - B.A., University of Minnesota; M.S., Mankato State University; Ph.D., University of Minnesota
Director of Leadership Studies - 1991
Associate Professor of Educational Leadership, Counseling, and Postsecondary Education - 1997

## Academic Services

Reginald J. Green - B.A., Luther College; M.A., MA., University of Northern Iowa
Director of Academic Services - 1974 (1993)
Karen S. Agee - A.B., A.M., Indiana University; Ph.D., New Mexico State University
Reading/Learning Strategies Coordinator - 1984

## Advising and Career Services

Jean M. Neibauer - B.A., Mercy College of Detroit; M.A., University of Northern Iowa
Interim Director/Advising Services - 1983 (2004)
Michael A. Broshears - B.A., Indiana University; M.S., Miami University
Academic Advisor - 1995 (1998)
David M. Marchesani - B.A., M.A.E., University of Northern Iowa Academic Advisor - 1999
Michele K. Peck - B.A., M.S., University of Nebraska-Kearney
Academic Advisor - 1996 (1999)

Connie Collin - B.A., Peru State College; M.A., University of NebraskaKearney
Assistant Director/Business Career Services - 2001 (2004)
Bob Frederick - B.A., M.A., University of Iowa
Interim Director/Career Services - 2001 (2004)
Jessica Heidemann - B.A., University of Northern Iowa; M.A.E., University of Northern Iowa
Cooperative Education Coordinator - 1999 (2003)
Martin Robertson - B.A., University of Texas, Arlington; M.A., University of Northern Iowa
Information Technology Specialist - 1999 (2000)
Tracey Roling - B.A., Cornell College; M.A.E., University of Northern lowa
Assistant Director/Education Career Services - 1996
Susan M. Schwieger - B.S., M.S., Illinois State University; M.A., University of Northern Iowa
Associate Director/Liberal Arts Career Services - 1989 (1996)
Allan J. Stamberg - B.S., Western Michigan University; M.A., Appalachian State University; M.A., U.S. Naval War College
Director of Cooperative Education - 1976
Elizabeth T. Vanderwall - B.F.A., Drake University
Events Coordinator - 1988 (1991)
D. Isabela Varela - B.A., University of Minnesota; M.A., University of Iowa; M.A., University of Northern Iowa
Career Information Specialist - 1991 (1996)
Donna E. Vinton - B.A., University of Northern Iowa; Ph.D., University of Iowa
Associate Director/Career Development - 1989 (1996)

## Office of Admissions

Roland Carrillo - B.B.A., St. Mary's University-San Antonio; M.A., University of Texas-San Antonio
Executive Director of Enrollment Management - 1987 (2004)
Jon D. Buse - B.A., M.A.E., University of Northern Iowa
Assistant Director of Admissions/Orientation and Campus Visits - 1992 (2001)

Jennifer L. Farrell - B.A., University of Northern Iowa
Admissions Counselor/Telecounseling Supervisor - 2003
Ronald E. Green - B.A., University of Northern Iowa
Admissions Counselor - 1989
Dennis L. Hendrickson - B.A., M.A.t, University of Northern lowa Associate Director of Admissions - 1971 (1974)
Joanne K. Loonan - BA., M.A., University of Northern lowa Assistant Director of Admissions - 1994 (1997)
Kristi T. Marchesani - B.A., M.A.E., University of Northern Iowa
Assistant Director of Admissions/International - 1999 (2001)
Martin Robertson - B.A., University of Texas, Arlington; M.A., University of Northern Iowa
Information Technology Specialist - 1999 (2000)
Paul R. Sapp - B.A., University of Northern Iowa; M.A., Drake University
Transfer Admissions Counselor - 2003
Amy Schipper - B.S., University of Northern Iowa; M.S., Western Illinois University
Admissions Counselor/Campus Visit Coordinator - 2001 (2004)
Daniel J. Schofield - B.A., M.A.E., University of Northern Iowa
Assistant Director of Admissions - 1985 (1990)
Ross Schupbach - B.A., Doane College
International Student Advisor - 2002
Juanita P. Wright - B.A., University of Northern lowa Assistant Director of Admissions - 1975 (1987)

## Center for Multicultural Education

Michael D. Blackwell - B.A., Wesleyan University; M.Div., Yale
Divinity School; Ph.D., Boston University
Director for Multicultural Education - 1995
Adjunct Associate Professor of Philosophy and Religion

## Financial Aid Office

Roland Carrillo - B.B.A., St. Mary's University-San Antonio; M.A., University of Texas-San Antonio
Executive Director of Enrollment Management - 1987 (2004)
Timothy L. Bakula - B.A., University of Northern Iowa
Student Employment Coordinator - 2003
Nancy S. Boleyn - B.A., University of Northern Iowa
Assistant Director/Operations - 1987 (2001)
Adelmo A. Jaramillo - B.S., Upper Iowa University
Financial Aid Counselor - 1988 (2001)
Joyce S. Morrow - B.A., M.A.E., University of Northern Iowa Associate Director of Financial Aid - 1996 (2001)
Heather A. Soesbe - B.A., M.A.E., University of Northern lowa Financial Aid Counselor - 2000 (2001)
Evelyn D. Waack - B.A., Luther College; M.A.T., University of Iowa Financial Aid Specialist - 1984 (1991)

## Maucker Union

Janice M. Hanish - B.A., M.A., University of Northern lowa; Ph.D., University of lowa
Director of Maucker Union and Student Involvement and Activities - 1977 (1998)

Bryan L. Beardsley - A.A., Kirkwood Community College; B.A., University of Northern Iowa
Operations Manager - 1988 (1997)
Mike Bobeldyk - B.S., M.A., University of South Dakota
Program Coordinator - 2000
Constance C. Hansen - B.A., University of Northern Iowa
Coordinator of Student Organizations and Activities - 1989 (2004)
Shelley R. Pruess - B.A., University of Northern lowa
Business and Retail Manager - 1995 (1998)
Guy A. Sims - B.S., Lincoln University, Pennsylvania; M.Ed., Beaver College; M.A., National University; Ed.D., University of Northern Iowa
Associate Director of Maucker Union and Student Involvement and Activities - 1996 (2001)

## Office of the Registrar

Philip L. Patton - B.A., M.A., University of Northern lowa University Registrar - 1972 (1991)
Douglas D. Koschmeder - B.A., M.A.E., University of Northern lowa Associate Registrar — 1986 (1995)
Patti J. Rust - B.A., M.B.A., University of Northern Iowa
Associate Registrar, Student Systems and Services - 1988 (1998)
Diane M. Wallace
Coordinator of Student Statistics and University Catalog - 1978 (2001)

## Department of Residence

Michael A. Hager - B.A., University of Northern Iowa; M.B.A., University of Dubuque
Director of Residence - 2004
Brent Ascher - B.T., University of Northern Iowa
Assistant Director of Residence/Facilities - 2003

## Madonna Austin

Assistant Manager, Custodial Services - 2003
Patricia Beck - B.S., Iowa State University; M.B.A., University of Northern Iowa
Assistant Director of Residence/Marketing - 1999
Nandini Bissessar-Grant - B.A., Monmouth College; M.A., Western Illinois University
Hall Coordinator - 2002
Kara Buss - B.A., University of Northern Iowa
Assistant Dining Unit Manager - 2001
Erin Corcoran - B.A., University of Northern Iowa; B.B.A., University of Iowa
Technology and Receiving Coordinator/Dining - 2003
Treva Crawford - B.A., University of Northern Iowa
Assistant Manager - 1998
Sandy Curren - B.S., Northwest Missouri State University
Assistant Dining Unit Manager - 2001
Gary C. Daters - B.A., University of Northern Iowa
Residence Business Manager - 1973 (1978)
Sara Eberle - B.A., University of Northern Iowa
Assistant Dining Unit Manager - 2001
Margaret J. Empie - B.S., University of Wisconsin-Stout; M.B.A., University of Northern Iowa
Assistant Director of Residence/Dining Special Services - 1980 (1989)
Bradley Fletcher - B.A., University of Northern Iowa
Retail Manager - 1998
Caral L. Fletcher - B.A., M.B.A., University of Northern Iowa
Assistant Director of Residence/Residential Dining - 1988 (1999)
Jacqueline Grieger
Manager, Custodial Services - 1995
Elisabeth J. Hageman - B.A., University of Northern lowa
Assistant Dining Unit Manager - 1985
Joe Hermsen - B.A., University of Northern Iowa
Assistant Manager, Catering - 2001
Trisha Hoffman - B.S., Iowa State University; M.A., University of Northern Iowa
Hall Coordinator - 2002
Chris Kenaga - B.A., University of Northern Iowa
Assistant Dining Unit Manager - 2001
Michael Kidd
Assistant Manager, Custodial Services B 2003
Deb Kinsey - BA., University of Northern Iowa
Assistant Manager - 2001
Lisa Krausman - B.S., University of Northern Iowa; ADA, Iowa State University
Dining Unit Manager - 1999 (2001)
Lisa Kremer - B.S., Iowa State University
Assistant Dining Unit Manager - 2003
Rosanne L. Lang - B.A., University of Northern Iowa
Dining Unit Manager - 1985 (1993)
Barhara Larkin - B.S., M.B.A., Upper Iowa University
Assistant Manager, Dining - 1998
Nancy Lindgard - B.A., Buena Vista University
Technology Coordinator - 1989 (1998)
Drake E. Martin - B.J., University of Texas-Austin; M.A., Bowling Green State University
Assistant Director of Residence/Education - 1981
Ramona K. Milius - B.A., M.B.A., University of Northern Iowa
Associate Director of Residence/Dining - 1980 (1987)
Sarah Miller - B.A., University of Northern Iowa
Catering and Conference Coordinator - 1993 (1998)

Scott Mitchell - B.A., Wartburg College; M.S.W., University of North Dakota
Hall Coordinator - 2001
Cathy Moore - A.O.S., Culinary Institute of America
Fresh Beginnings Manager - 2001
Eric Moschella - B.A., M.A., University of Iowa
Hall Coordinator - 2003
Lynn S. Perigo - B.A., M.A., University of Northern lowa
Manager/University Apartments - 1989
Krista Prather - B.A., M.A.E., University of Northern Iowa
Hall Coordinator - 1999
Dawnell Quade - B.A., University of Northern Iowa
Assistant Dining Unit Manager - 2001
Lyn Redington - B.S., M.S., Iowa State University
Associate Director of Residence/Housing - 1994
R. Kent Ruby - B.S., Northwest Missouri State University

Technology Coordinator, Dining - 1967 (1980)
Angela Sadler - B.A., University of Northern Iowa
Dining Unit Manager - 1997 (1999)
David Schmid - B.B.A., University of Wisconson-Whitewater; M.S., Oklahoma State University
Hall Coordinator - 2002
Gale K. Secor - B.A., University of Northern Iowa; B.S.N., Allen College
Food Stores Manager - 1990 (1996)
Todd Thomas - B.A., University of Northern lowa
ResNet Specialist - 2002
Greg Thompson - B.S., Eastern Illinois University; M.A., University of Missouri-Columbia
Hall Coordinator - 2002
Dorothy M. Van Helten - B.S., Iowa State University
Assistant Dining Unit Manager - 1982
Michael Weiglein - B.S., University of Northern Iowa
Assistant Dining Unit Manager - 2001
Catherine E. Wylam - B.S., University of Northern lowa
Technology Coordinator/Dining - 1989 (1997)
Carolyn M. Young - B.A., University of Northern Iowa
Maucker Union Food Service Manager - 1984 (1987)
Rebecea Young - B.A., University of Northern Iowa
Catering Manager - 1997

## University Heaith Services

Kethleen M. Gulick - B.A., M.A., University of Northern Iowa University Health Services Director - 1989 (2000)

## Counselling Center

David C. Towle - B.A., M.A., University of Northern Iowa; Ph.D., University of Missouri-Columbia
Counseling Director - 1998
Paula J. Gilroy - B.S., M.S., Shippensburg University; Ed.D., West Virginia University
Psychologist - 1988 (1995)
Jennifer K. Murra - B.A., M.A., University of Northern Iowa
Counselor - 1999
Jacqueline J. Slykhuis - B.A., Stephen F. Austin State University; R.N., Allen School of Nursing

Coordinator Disability Services - 1986 (1996)
Deginesh Worku - B.A., Augsburg College-Minneapolis; M.A., University of Northern Iowa
Counselor - 1997

Student Health Clinic
L. Sue Courts - R.N., Allen School of Nursing, B.S.N., M.S.N., University of Iowa
Director of Student Health Clinic - 2000
Cornell M. Baduva - Pharm.D., Creighton University
Pharmacist - 2003
Mary Byggere - Medical Lab Assistant, Hawkeye Institute of Technology
Clinical Laboratory Technician - 1976 (2000)
Jergene M. Delaney - RN., Hawkeye Institute of Technology; B.A., University of Northern Iowa
Student Health Clinic Registered Nurse - 1991
Gina I. Ellingson - B.S., University of Iowa College of Medicine
Physician Assistant - 1995
Bruce E. Forystek - B.S., St. Cloud State University; M.D., University of Minnesota
Student Health Clinic Physician - 1982
Lewis B. Harden - D.M.D., Harvard School of Dental Medicine; M.D., University of Iowa Medical School
Student Health Clinic Physician - 1994 (2000)
Shelly M. Joblinske - B.A., Upper Iowa University
Medical Records Administrator - 2003
Kristine M. Jorgensen - R.N., Allen School of Nursing
Student Health Clinic Nursing Coordinator - 1997 (2000)
Ann H. McRae - R.N., Lynn Hospital School of Nursing; B.A., University of Northern Iowa
Student Health Clinic Registered Nurse - 1988 (2000)
Martha A. Ochoa - B.S., Valparaiso University; M.D., UHS Chicago Medical School
Physician and Supervisor of Prescribing Providers - 2001 (2003)
Donald G. Williams - B.A., University of South Florida
Health Service Administrator - 1995
Cathy J. Zarifis - B.A., University of Northern Iowa; R.N., Mercy Medical Center School of Nursing, Dubuque
Clinic Registered Nurse - 2003
Jane D. Zehr - P.A., University of Osteopathic Medicine and Health Sciences, Des Moines; M.H.A., Des Moines University
Student Health Clinic Physician Assistant - 1999

## Wellness and Recreation Services

Deedra M. Billings - B.A., M.A., University of Northern Iowa
Wellness Resource Coordinator - 2001
Latitia D. Craig - B.A., University of Northern Iowa
Violence Prevention Coordinator - 2001
Christopher B. Denison -- B.A., University of Oregon; M.A., University of Northern Iowa
Assistant Director of Wellness and Recreation Services and Informal Recreation and Aquatics Coordinator - 1995 (2001)
Dana A. Foster - B.A., University of Northern Iowa
Instructional Program Coordinator - 1993 (1996)
Cynthia L. Klatt - B.A., Central College
Intramural Sports Coordinator - 1993 (1996)
Timothy H. Klatt - B.A., Central College; M.A., University of Northern Iowa
Associate Director, Recreation - 1983 (2000)
James A. Langel - B.A., University of Iowa; M.A., University of South Dakota
Associate Director, Facilities and Operations - 1997 (2000)
Kristine M. Leen - B.A., M.S.Ed., University of Toledo
Personal Fitness Coordinator - 2001

Andrew K. Martin - B.A., Sam Houston State University; M.A, Middle Tennessee State University
Outdoor Recreation Coordinator - 1997
Joan A. Thompson - L.P.N., Rochester School of Practical Nursing; B.A., University of Northern Iowa

Health Aid Coordinator - 1982
Julie A. Thompson - B.A., University of Northern Iowa; M.A., Stephen F. Austin State University

Substance Abuse and Sexual Assault Services Coordinator - 1992 (1997)

## Division of Administration and Finance

## Division Administration

Thomas G. Schellhardt - B.S., Southern Illinois University; M.S., Purdue University
Vice President for Administration and Finance - 2002
Eunice A. Dell - B.A., M.B.A., University of Northern Iowa
Assistant Vice President for Administration and Finance - 1977 (1990)
Jennifer C. Hansmann
Administrative Assistant - 1986 (1997)
Marty Mark - B.A., University of Northern Iowa
Director of Technology Systems and Services - 1989 (2004)
Cheryl D. Moses
Information Technology Specialist - 1976 (1999)
Mary J. Prenosil - B.A., University of Iowa; M.B.A., University of Northern Iowa
Budget Systems Manager - 1982 (2004)
Patricia B. Whitt - B.S., University of South Dakota
Information Technology Training and Support Specialist - 1996 (2002)

## Financial Accounting and Reporting Services

Gary B. Shontz - B.B.A., University of Iowa; M.A.E., Ed.S., University of Northern Iowa
Controller and Secretary/Treasurer — 1974 (1976)
Denise H. Bouska - B.A., University of Northern Iowa
Accounting Manager/Financial Reporting - 1993 (1997)
Mark D. Fober - B.A., Wartburg College; M.B.A., University of Northern Iowa
Accounting Manager/Operations - 2003
Tonya L. Gerbracht - B.A., Wartburg College
Accountant - 2000
Bruce A. Rieks - B.A., University of Northern Iowa
Assistant Controller and Chief Accountant - 1979 (1985)

## Intercollegiate Athletics and UNIDome Administration

Rick Hartzell - B.A., M.A., University of Northern Iowa
Director of Athletics - 1999
John J. Bermel - B.A., Central College
Head Men's and Women's Golf Coach - 1995
Donald L. Bishop - B.S., Upper Iowa University; M.A., University of Northern Iowa
Head Athletic Trainer - 2001
Kelly M. Bockenstedt - B.A., University of Northern Iowa
Athletic Development Coordinator - 2000

Rob P. Bolks - B.A., Iowa State University
Defensive Secondary/Recruiting Coordinator - 2002
Megan P. Brady - B.A., Briar Cliff College; M.P.E., Idaho State University
Assistant Athletic Trainer - 2001
Julie A. Bright - B.A., University of Northern Iowa
Senior Associate Director of Athletics/Senior Woman Administrator - 1975 (2004)

Catherine L. Broshears - B.S., Indiana University
Assistant Soccer Coach - 2000
Christopher E. Bucknam - B.S., Norwich University; M.A., University of Northern Iowa
Director of Running Programs - 1979 (2003)
Douglas A. Case - B.A., University of Northern Iowa
Assistant Men's/Women's Track/Cross Country Coach - 1999
Nate Clayberg - B.S., Iowa State University; M.A., Virginia Common Wealth
Development and Marketing Promotions - 2003
Leon M. Costello - B.A., Loras College; M.S., Western Illinois University
Director of Marketing and Promotions - 2002
Mike Daugherty - B.S., Pennsylvania State University; M.S., West Virginia University
Head Strength and Conditioning - 2002
Gregory A. Davies - B.A., University of Northern Iowa; M.S.S., United States Sports Academy
Ticket Manager - 1999 (2000)
Daniel H. Davis - A.A., Cowley Cqmmunity College; B.S., M.S., Southern Illinois University
Assistant Baseball Coach - 2000
Jose DeAnda - B.A., University of Nebraska
Assistant Wrestling Coach - 2004
Anthony B. DiCecco - B.S., Upper Iowa University
Head Women's Basketball Coach - 1995
Shandon M. Dohmen - B.A., University of Northern Iowa
Assistant Operations Director - 2002
Mark A. Farley - B.A., M.A., University of Northern Iowa
Head Football Coach - 1986 (2001)
Matthew J. Gage - B.S., University of Northern Iowa; M.S., Eastern Kentucky University
Assistant Athletic Trainer
Instructor in School of Health, Physical Education, and Leisure Services - 1999

Jill M. Gansemer - B.A., M.B.A., St. Ambrose University
Director of Design and Information Management - 2000 (2003)
Steve Gearhart - B.A., University of Northern Iowa; M.A., Kent State University
Assistant Athletic Director/Development - 2001
Travis Geopfert - B.A., University of Northern Iowa
Assistant Men's and Women's Track Coach - 2003
Christy J. Hebert - B.S., University of Iowa
Head Softball Coach - 2000 (2003)
Colleen A. Heimstead - B.A., Southern Illinois University
Assistant Athletic Director/Compliance - 1992 (2004)
Rick D. Heller - B.S., Upper Iowa University
Head Baseball Coach - 1999
William D. Inge, Jr. - B.S., M.A., University of Iowa
Assistant Football Coach - 2001
Ryan M. Jacobs - A.A., Kirkwood Community College; B.A., University of Northern Iowa
Assistant Baseball Coach - 2001

Ben S. Jacohson - B.S., University of North Dakota
Assistant Men's Basketball Coach - 2001
Nancy A. Justis - B.A., University of Iowa
Director of Media Relations-Internal - 1974 (2003)
Kathy Kakoyianni-Bering - B.H.S.C., University of Western Ontario
Assistant Women's Soccer Coach - 2003
Kyle L. Kepler - B.A., University of Northern Iowa
Head Men's and Women's Cross Country Coach - 1998 (2003)
Sachin A. Kirtane - B.B.A., M.B.A., Valdosta State University
Head Women's Tennis Coach - 2002

## David A. Kohrs

UNI-Dome Facilities Coordinator - 1977 (1989)
Kevin L. Launderville - B.A., University of Northern Iowa
Concessions and Retail Operations Manager - 2001
Joshua Lehman - B.A., University of Northern Iowa; M.A., Marshall University
Director of Media Relations-External - 2003
Kalani Mahi - B.A., Graceland University; M.A., University of Mississippi
Assistant Women's Volleyball Coach - 2004
Gregory J. McDermott - B.A., University of Northern Iowa; M.A., United Sports Academy
Head Men's Basketball Coach - 2001
Darin T. Moening - B.S., St. Cloud State University
Assistant Golf Coach - 2003
Anthony Molinari - B.A.; M.S., West Virginia University
Assistant Strength and Conditioning - 2003
Jason R. Nellis - B.A., University of Northern Iowa
Assistant Facilities Director/Sports Camp Director - 2001 (2003)
Brad R. Nelson - B.A., University of Oregon
Assistant Women's Basketball - 2000
Rick Nelson - B.A., University of Northern lowa
Assistant Football Coach - 2000
Steven P. Nurse - B.A., University of Northern Iowa
Equipment Manager -- 1993
Brad Penrith - B.S., University of Iowa
Head Wrestling Coach - 1997 (2000)
Bobbi J. Petersen - B.A., M.A., University of Northern Iowa
Head Women's Volleyball Coach - 1995 (2001)
Allison D. Pohlman - B.S., University of Northern Iowa
Assistant Women's Basketball Coach - 2000
Randall L. Pugh - B.A., University of Northern Iowa
Assistant Wrestling Coach — 2000
Jeff Rutter - B.A., Winona State; M.Ed., North Dakota State University
Assistant Men's Basketball Coach - 2003
William C. Salmon - B.L.S., University of Northern Iowa
Assistant Head Coach/Offensive Coordinator/Wide Receivers - 2001
Justin G. Sell - B.S., Bowling Green State University; M.A., Ohio State University
Associate Athletic Director/Internal Operations - 1999 (2002)
Stacey L. Simmer - B.A., University of Iowa
Head Women's Swimming Coach - 2002
Ronald W. Smith - B.S., Illinois State University; M.S., Southern Illinois University
Assistant Men's Basketball Coach - 1998
Heather R. Tousignant - B.A., University of Northern Iowa Director of Operations/Athletic Facilities - 2003
Tammy M. Utley - B.S., University of Iowa
Assistant Softball Coach - 2004
Mario A. Verduzco - B.A., M.A., San Jose State University
Assistant Football Coach - 2001

Dennis Vokolek - B.S., University of Nebraska-Kearney; M.A., University of Nebraska-Omaha
Assistant Head Coach - 2003
Kelley L. Westhoff - B.A., University of Northern Iowa Assistant Women's Basketball Coach - 1997 (1999)
Linda J. Whitehead - B.A., University of Western Ontario; M.Ed., University of Victoria
Head Women's Soccer Coach - 2000

## Office of Business Operations

Kelly A. Flege - B.S., Boston College
Director of Business Operations - 1999 (2004)
Linda K. Gruetzmacher - B.S., University of Illinois; B.S., University of Washington
Payroll Manager - 1988 (1991)
Vincent P. Heuer - B.B.S., University of Northern lowa
Fixed Asset Accountant - 2002
Kelly A. Hoeppner - B.S., M.B.A., Upper Iowa University Accountant - 2003
Brian T. Looby - B.B.A., University of Wisconsin-Eau Claire
Bursar - 1988
Melissa M. Schreiber - B.A., Clarke College
Payroll Coordinator - 2000

## Purchasing Services

## Roxanne Conrad

Director of Purchasing Services - 1968 (1986)
Charles L. Neil - B.B.A., Western Illinois University
Purchasing Agent - 1991

## Facilities Management

Morris E. Mikkelsen - B.S., B. Architecture, M.S., Iowa State University
Associate Vice President for Facilities Management/University Architect - 1983 (2004)

Bill D. Bonwell - B.S., Colorado State University
Owners Construction Representative - 1993 (1998)
Carol M. Christopher - B.A. University of Northern Iowa
Planner/Interior Design Services - 1999
Tony Hanson - B.S., University of Northern Iowa
Architectural Planner - 2000
Douglas R. Jensen - B.B.A., University of Iowa
Associate Director of Facilities Operations - 1989 (2004)

## Douglas G. Lovejoy

Owners Construction Representative/Engineering Planner - 1977 (1996)

John Mirchich - B.S., Pennsylvania State University
Associate Director, Construction Administration - 1999 (2001)
William D. Nelson - B.A., B.S., Iowa State University
Associate Director/Architectural and Engineering Services - 1999

## Steven E. Pavelec

Owners Construction Representative - 1998
C. George Pavelonis - B.S., Southern lllinois University

Coordinator of Interior Design Services - 1985
John E. Streicher - B.S., University of Iowa
Senior Facilities Engineer - 1999
Glenn Swanson - B.A., lowa State University
Senior Architectural Planner - 1999 (2004)
Douglas Van Camp - B.M., Indiana University; M.M., DePaul University; M.B.A., University of Southern Florida
Facilities Information Systems Manager - 1992 (1997)

Michael W. Iwanziger - B.A., B.T., M.B.A., University of Northern Iowa
Facilities Planner/Coordinator - 1998

## Human Resource Services

Nick T. Bambach - B.S., Central Michigan University; M.A., Ball State University
Director of Human Resource Services - 1999
Michelle C. Byers - B.A., University of Northern Iowa
Employee and Labor Relations Coordinator - 1999 (2003)
M. Liz Cook - B.A., University of Northern Iowa

Human Resource Services Merit Coordinator - 1989 (1999)
Eileen F. Dams - B.A., University of Northern Iowa
Human Resource Information System Coordinator - 1982 (1995)
Jan M. Flick - B.S., Iowa State University
Human Resource Services Benefits Manager - 1998 (2003)
Robin A. Gurien - B.A., California State University; M.A., San Diego State University; Ph.D., University of California-Santa Barbara
Training and Career Development Coordinator - 2000
Cindy M. Hoeppner - B.A., University of Northern Iowa
Benefits Generalist - 2001
Kim A. Schares - B.A., University of Northern Iowa; M.B.A., University of lowa
Professional and Scientific Coordinator - 1998 (1999)

## Physical Plant

## Administration

Dean A. Shoars - A.A.S., Hawkeye Institute of Technology; B.A., Parsons College; M.A., University of Northern Iowa
Director of Physical Plant - 1987 (1997)
David M. Andersen - A.A.S., Hawkeye Institute of Technology
Maintenance/Support Coordinator - 1979 (1995)
Steven W. Cutsforth - B.A., University of Northern Iowa
Buyer Coordinator - 1974 (1986)
Dennis J. Hayes - B.A., Upper Iowa University
Operations Administrator - 1997
Cynthia S. Houlson - B.A., M.A., University of Northern lowa
University Safety Manager - 1998 (2000)
Wendel E. Reece - B.S., Southern Illinois University
Physical Plant Safety Coordinator - 2000

## Campus Services

William T. McKinley - B.A., University of Northern Iowa
Assistant Director, Campus Services - 1982 (2001)
John R. Geary
Assistant Manager, Building Services - 1982 (1988)
Catherine S. McRoberts - Professional Diploma, CACUBO Management Institute; CPPB, UPPCC
Warehouse/Materials Manager - 1984 (2001)

## Dennis L. Nieman

Assistant Manager, Transportation — 1987 (2003)
Jack H. Shafer
Assistant Manager, Building Services - 1987 (1997)
Steven C. Young
Assistant Manager, Transportation - 1979 (2003)

## Energy Services

Thomas J. Richtsmeier - B.S.M.E., Iowa State University
Assistant Director, Energy Services - 1982 (2001)
Scott J. Hall - A.S., North Iowa Area Community College
Manager, Plumbing/Steam/HVAC/Area Maintenance - 1977 (1995)
Charles F. Fosselman - B.S., Upper Iowa University
Manager, Power Plant - 1972 (2000)
Stuart S. Mackey - B.S., Upper Iowa University
Maintenance Manager, Power Plant - 1995 (2000)
Brent L. Maitland - B.S., University of Northern Iowa
Operations Manager, Power Plant - 1995 (2000)

## Operation Planning

Paul E. Meyermann - B.S., Iowa State University Assistant Director, Operations Planning - 1985 (2000)
Darrell R. Hansen - Mech. Tech., Hawkeye Institute of Technology
Maintenance Contract Coordinator/Fire Safety Assistant - 1982 (2000)

## Terry L. Sheerer

Manager, Grounds - 1982 (1997)
Delmar J. Sherwood
Facilities Access/Maintenance Coordinator - 1967 (2000)

## Public Safety

David J. Zarifis - A.A.S., Hawkeye Institute of Technology; B.A., M.A., University of Northern Iowa
Director of Public Safety - 1988 (2001)

## Division of University <br> Advancement

## Division Administration

William D. Calhoun, Jr. - B.A., Hiram College, Ohio; M.A., University of Northern Iowa
Vice President for University Advancement/President, UNI Foundation - 1981 (1999)

Gerald Anglum - B.A., University of Northern Iowa
Assistant Vice President for Marketing and Public Relations - 1989 (2004)

Jean A. Carlisle - B.A., M.A., University of Northern Iowa
Administrative Assistant - 1984 (1989)
Secretary, UNI Foundation (1999)

## Office of Alumni Relations

Noreen M. Hermansen - B.S., Oklahoma College of Liberal Arts; M.A.E., University of Northern lowa

Director of Alumni Relations
President of Northern Iowa Alumni Association - 1968 (1988)
Jennifer JN Albertsen - B.A., University of Northern Iowa
Assistant Director of Alumni Relations for Marketing - 2000
Amy C. Mohr - B.A., University of Northern Iowa
Assistant Director of Alumni Relations, Programming - 2000

## Office of Development

Scott Leisinger - B.A., Wartburg College; M.A., University of Northern Colorado
Vice President for Development - 2003

Susan Bettis - B.A., University of Northern Iowa
Foundation Accountant - 1998
Heather L. Bremer-Miller - B.A., University of Iowa
Director of Development, College of Natural Sciences and College of Social and Behavioral Sciences - 2000
Vicki L. Collum - B.A., Upper Iowa University
Grantwriter/Facilitator - 1998
Diane C. Curtis - B.A., Malone College; M.A., University of Iowa
Director of Development, College of Humanities and Fine Arts - 1997
Maureen F. Daley - A.A., Eastern Iowa Community College; B.S., Iowa State University
Systems Analyst — 1985 (2001)
Ann Dolphin - B.A., Wartburg College
Foundation Accountant - 1999
Frank L. Esser - B.A., M.A., University of Northern Iowa
Director of Collegiate Development - 1995 (1999)
Kristi J. Even - B.A., University of Northern Iowa, C.P.A.
Director of Accounting - 1994 (1997)
Assistant Treasurer of the UNI Foundation - 1999
Steve R. Gearhart - B.A., University of Northern Iowa; M.A., Kent State University
Assistant Athletic Director for Development - 2001
Ronald E. Giddings Jr. - B.A., University of Northern Iowa
Researcher - 1997
Michael B. Hoy - B.A., University of Northern Iowa
Advancement Systems Manager - 1997
Keevan Kosidowski - B.A., University of Iowa
Director of the Annual Fund - 1997 (1999)
Shannon McQuillen - B.A., University of Northern Iowa
Director of Development, College of Education - 2003
Caroline L. Rankin - B.A., University of Northern Iowa
Director of Development, College of Business Administration - 2001
Ruth E. Ratliff - B.A., St. Olaf College; M.A., Ph.D., University of Iowa
Director of Central Development/Vice President of the UNI Foundation - 1976 (1999)

Susan J. Reinart - B.A., University of Northern Iowa
Stewardship Coordinator - 1999
Severin Roberts - B.A., University of Missouri-Columbia; M.A., University of Kansas
Assistant Director of Annual Giving - 2003

## Office of University Marketing \& Public Relations

Gerald V. Anglum - B.A., University of Northern Iowa
Assistant Vice President for Marketing \& Public Relations - 1989 (2004)

Stacey M. Christensen - A.A. Rochester Community College; B.A. Wartburg College
Community Relations Manager - 1999
Gwennette Culpepper - B.A., Iowa State University
News and Editorial Services Manager - 1992 (1999)
Randall S. Darst - B.F.A., Ball State University
Graphic Designer - 2000
Vicki S. Grimes - B.A., University of lowa
News and Information Coordinator - 1970 (1999)
Paul C. Kaufmann - B.A., Iowa State University Producer/Director, Teleproduction Center - 1991 (1996)
Denton E. Ketels - B.A., University of Northern lowa Publications Editor - 1999

Elizabeth Conrad La Velle - B.A., Lawrence University, Wisconsin;
M.A., Western Michigan University

Art Director/Designer - 1977 (1990)
James E. O'Connor - A.A., North Iowa Area Community College;
Diploma, Department of Defense Information School; AAL.S., Community College of the Air Force; B.A., University of Northern Iowa; APR
Media Relations Director - 1999
DeWayne D. Purdy - B.S., Upper lowa University
Electronic Communications Manager - 1996 (1999)
Mary L. Taylor - B.A., University of Iowa
Publications Editor - 2000

Janice F. Abel - B.M.E., M.M.E., Drake University; Ed.D., Indiana University
Director of Academic Advising Services - 1972 (1992)
James E. Albrecht - B.A., M.A., Ed.S., University of Northern Iowa; Ed.D., Indiana University
Professor of Educational Administration and Counseling - 1965 (1990)
John F. Aldrich - B.S., University of Rhode Island; M.Ed., Boston University
Professor of Teaching - 1955 (1986)
Mary Nan Koen Aldridge - B.S., M.S., Texas A \& I University; Ed.S., University of Northern Iowa; Ph.D., Iowa State University
Professor of Curriculum and Instruction: Elementary and Middle Level Education - 1967 (1990)
H. Wendell Alford - B.A., John B. Stetson University; B.D., Southwestern Baptist Theological Seminary; B.S.L.S., North Texas State University
Associate Professor of Library - 1959 (1986)
Assistant Director of Technical Services of the Library - 1959 (1986)
Edward W. Amend - B.A., Midland Lutheran College; M.Div., S.T.M., Lutheran School of Theology-Chicago; Ph.D., University of Chicago
Professor of Religion and Humanities - 1967 (1997)
Head of the Department of Philosophy and Religion - 1993-1997
B. Wylie Anderson - B.A., M.A., University of Northern Colorado; M.A.,

University of Denver; Ph.D., University of Iowa
Professor of Economics - 1966 (1999)
James D. Anderson - B.S., M.S., Eastern Illinois University
Assistant Professor of Physical Education - 1965 (1992)
Ruth B. Anderson - B.A., University of California-Berkeley; M.S.W., Columbia University
Professor of Social Work - 1969 (1990)
Wayne I. Anderson - B.A., M.S., Ph.D., University of Iowa
Professor of Geology - 1963 (2000)
C. Murray Austin - B.A., M.A., Ph.D., University of Pennsylvania

Professor of Geography and Regional Science - 1973 (2003)
George G. Ball - B.S., M.A., Kent State University; Ed.D., University of Wyoming
Professor of Education and Psychology - 1958 (1978)
Jackson N. Baty - B.A., Stanford University; M.A., Ed.S., University of Northern Iowa; Ed.D., Drake University
Assistant Professor of Educational Psychology and Foundations - 1971 (1987)

Diane L. Baum - B.A., M.A., University of Northern Iowa
Assistant Professor of Mathematics - 1964 (1997)
Walter E. Beck - B.M.E., Knox College; M.A., Ph.D., University of Illinois, Urbana-Champaign
Associate Professor of Computer Science - 1980 (2000)
James Edward Becker - B.A., Cornell College; M.A., University of Paris-Sorbonne
Associate Professor of Teaching: Foreign Language - 1970 (1999)
Judy Markham Beckman - B.A., M.A., University of Northern Iowa; Ph.D., University of Minnesota
Assistant Professor of Teaching: Language Arts - 1969 (2001)
Coordinator of Student Teaching
Mary Green Beckman - B.M., Oberlin Conservatory of Music; M.M., Cleveland Institute of Music
Professor of Harp and Theory - 1947 (1990)
Harold E. Bernhard - B.A., Carthage College, Illinois; B.D., Chicago Lutheran Theological Seminary; Ph.D., University of Chicago
Director of the Bureau of Religious Activities
Professor of Religion — 1949 (1974)
M. Roger Betts - B.A., University of Northern Iowa; M.A.E., Ball State University; Ed.D., Arizona State University
Associate Professor of Industrial Technology - 1975 (2001)
Hugo L. Beykirch - B.A., M.A., Ph.D., Wayne State University
Associate Professor of Audiology - 1974 (1999)
Steven E. Bigler - B.A., M.F.A., University of Minnesota
Professor of Art — 1978 (2003)
Gerald D. Bisbey - B.A., University of Northern Iowa; M.S., Iowa State University; Ph.D., University of Iowa
Coordinator of Institutional Studies - 1964 (1992)
Mary E. Blanford - B.A., Central Normal College, Indiana; M.S., Indiana University
Assistant Professor of Business Education and Administrative Management - 1961 (1982)
David R. Bluhm - B.A., Princeton University; B.Th., Princeton Theological Seminary; M.A., Ph.D., University of Pittsburgh
Professor of Philosophy and Religion - 1954 (1977)
Emil W. Bock - B.M., M.M., Northwestern University; Ph.D., University of Iowa
Professor of Music History - 1939 (1984)
Myra R. Boots - B.A., Grinnell College; M.A., University of Northern Iowa
Assistant Professor of Speech-Language Pathology - 1965 (1995)
Ronald D. Bro - B.A., M.A., University of Northern Iowa; Ed.D., University of Nebraska
Professor of Industrial Technology - 1967 (1992)
Emily Clara Brown - A.B., Ohio State University; M.A. in Ed., Arizona State University; Ph.D., University of Arizona
Professor of History - 1966 (1976)
John E. Bruha - B.S., University of Wisconsin-Stevens Point; M.S.,
University of Wisconsin-Madison
Assistant Professor of Mathematics - 1959 (1997)

## Ron D. Camarata

Biology Greenhouse and Preserves Manager - 1968 (2004)
James C. Chang - B.S., Mount Union College, Ohio; Ph.D., University of California-Los Angeles
Professor of Chemistry - 1964 (1995)
Bruce A. Chidester - B.M., Augustana College, Illinois; M.M., Northern Illinois University
Assistant Professor of Music in General Studies - 1969 (1999)
Tieh-Cheng Chin -B.A., National Northeastern University, China; M.A., M.L.S., University of Washington; A.M.L.S., Florida State University
Associate Professor of Library Science and Bibliographer - 1971 (1985)
Ronald A. Chung - B.S., Holy Cross College; M.S., Ph.D., Purdue University
Professor of Design, Family and Consumer Sciences: Nutrition and Food Science - 1986 (1999)
Robert E. Clark - B.A., Oklahoma State University; M.A., University of
Oklahoma; Ph.D., University of Nebraska
Assistant Professor of Geography - 1965 (1999)
Robert E. Claus - B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor of Sociology - 1959 (1992)
Phyllis B. Conklin - B.S., Carson-Newman College, Tennessee; M.S., Ohio University; Ph.D., University of Tennessee-Knoxville
Assistant Professor of Design, Family and Consumer Sciences: Nutrition and Food Science - 1968 (1997)
R. Forrest Conklin - B.A., Howard Payne College; M.A., Baylor University; Ph.D., Ohio University
Professor of Communication Studies - 1968 (1997)
John E. Conner - B.S., University of Illinois; M.A., Western Illinois University
Vice President for Administration and Finance - 1984 (2000)

Lee E. Courtnage - B.A., Nebraska State Teachers College; M.A., Colorado State College; Ed.D., University of Northern Colorado Professor of Special Education - 1968 (1994)
Elinor Ann Crawford - B.A., M.A., University of California-Berkeley; Ph.D., University of Oregon
Professor of Physical Education for Women
Head of the Department of Physical Education for Women - 1949 (1979)

John S. Cross - B.S., M.S., University of Illinois-Urbana
Assistant Professor of Mathematics - 1963 (1999)
David R. Crownfield — A.B., Harvard University; B.D., Yale University; Th.M., Th.D., Harvard University
Professor of Philosophy and Religion - 1964 (1998)
Eleanor B. Crownfield - B.A., Smith College; M.S.L.S., Simmons College
Assistant Professor and Catalog Librarian - 1964 (1996)
Donald G. Cummings - B.A., Coe College; Ph.D., Tulane University
Assistant Professor of Economics - 1963 (1998)
Barbara J. Darling - B.A., University of Northern Lowa; M.A., University of Northern Colorado
Associate Professor of Physical Education - 1958 (1985)
Donald R. Darrow - B.A., M.A., University of Northern Iowa; Ph.D., Ohio State University
Associate Professor of Teaching: Industrial Technology - 1973 (2002)
George F. Day - B.A., Dartmouth College; M.A.T., Harvard University; Ph.D., University of Colorado
Professor of English - 1967 (1994)
Charles V. Dedrick - B.A., Brown University; M.A.T., Rollins College; M.Ed., Ed.D., University of Florida

Professor of Educational Psychology and Foundations - 1971 (1999)
Walter E. DeKock - B.A., Central College; M.A., University of Northern Iowa; Ph.D., Ohio State University
Associate Professor of Science Education - 1964 (1992)
Ervin A. Dennis - B.A., M.A., University of Northern Colorado; Ed.D., Texas A\&M University
Professor of Industrial Technology - 1973 (1998)
Gordon B. Denton - B.B.A., University of Texas; M.B.A., University of Iowa
Associate Professor of Marketing - 1965 (1980)
Joan E. Diamond - B.A., Knox College; M.S., University of Illinois
Associate Professor of Teaching: Educational Media - 1957 (1990)
Saul L. Diamond - B.S., Syracuse University; M.B.A., Wharton School of Business, University of Pennsylvania
Associate Professor of Marketing - 1967 (1991)
Director of the Small Business Institute
Douglas D. Doerzman - B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching
Coordinator of Student Teaching - 1967 (1992)
Henry T. Dohrman - A.B., Nebraska State College; S.T.B., Ph.D., Harvard University
Professor of Sociology, Anthropology and Social Work - 1949 (1982)
Susann G. Doody - B.S., Northern Illinois University; M.S., University of Wisconsin; Ph.D., University of Southern California
Professor of Physical Education - 1977 (2000)
Gregory M. Dotseth - B.A., Luther College; M.A., Western Washington University; Ph.D., Iowa State University
Associate Professor of Mathematics - 1966 (2003)
James L. Doud B B.S.E., M.S.E., Drake University; Ph.D., University of Iowa
Professor of Educational Leadership, Counseling, and Postsecondary Education - 1978 (1994)

Richard S. Dauglas - A.B., J.D., Duke University; Ed.S., Rutgers University Graduate School of Education
University Risk Manager - 1976 (1990)
Virgil E. Dowell - B.S., M.S., Kansas State Teachers College; Ph.D., University of Oklahoma
Professor of Biology - 1956 (1988)
John C. Downey - B.S., M.S., University of Utah; Ph.D., University of California-Davis
Professor of Biology
Dean of the Graduate College - 1968 (1988)
William Dreier - B.S., Iowa State University; M.A., Ph.D., University of Minnesota
Professor of Educational Psychology and Foundations - 1949 (1985)

## Darlyce A. Drum

Administrative Assistant, Vice President for Administration and Finance - 1957 (1997)

Jacques F. DuBois - B.S., Kearney State College; M.A., University of Nebraska
Assistant Professor of French - 1966 (2003)
Jerry M. Duea - B.A., M.A., University of Northern Iowa; Ph.D., Iowa State University
Professor of Educational Psychology and Foundations - 1966 (1997)
Coordinator, Research and Evaluation Studies - 1992-1997
Joan M. Duea - B.A., M.A., University of Northern Iowa
Professor of Curriculum and Instruction: Elementary Education - 1965 (1997)

Ann Mary Dunbar - B.A., Clarke College; M.A., Ed.S., University of Northern Iowa
Associate Professor of Educational Psychology and Foundations - 1962 (1992)

Norris M. Durham - B.S., West Chester State College, Pennsylvania; M.A., New York University; Ph.D., Pennsylvania State University

Professor of Anthropology - 1979 (2002)
Mary K. Eakin - B.A., Drake University; B.L.A., M.A., University of Chicago
Associate Professor of Curriculum and Instruction - 1958 (1968)
Charlene M. Eblen - B.A., University of Wichita; M.A., University of Northern Iowa
Associate Professor of English - 1967 (1992)
Charlotte Eilers - B.A., M.A., University of Northern Iowa
Professor of Speech — 1965 (1982)
Ivan L. Eland - B.A., University of Northern Iowa; M.A., University of Colorado
Associate Professor of Curriculum and Instruction: Safety Education
Director of Safety Education - 1960 (1989)
Robert Eller - B.A., M.A., University of Iowa
Assistant Professor of Curriculum and Instruction: Educational Technology
Coordinator of Audio-Visual Services - 1961 (1991)
Clark K. Elmer - B.A., University of Michigan; M.A., Michigan State University
Director of Enrollment Management and Admissions - 1972 (2004)
Interim Director of The Career Center - 2001-2004
Ralph D. Engardt - B.S., Ph.D., Iowa State University
Associate Professor of Physics - 1965 (1995)
Harley E. Erickson - B.S., Wisconsin State University-LaCrosse; M.S., Ph.D., University of Wisconsin
Professor of Educational Psychology and Foundations - 1963 (1987)
Donald R. Erusha - B.A., Coe College; M.A., University of Iowa
Associate Professor of Physical Education - 1963 (2000)
Russell E. Euchner - B.A., M.A., University of Northern Iowa
Assistant Professor of Curriculum and Instruction: Elementary Education - 1960 (1991)

Manuel A. Febles - B.A., B.S., Instituto de Cardenas, Cuba; Doctor in Law, Universidad de la Habana, Cuba; M.A., Ph.D., University of Iowa
Professor of Spanish — 1967 (1984)
Rosa Maria E. Findlay - B.A., University of Puerto Rico; M.A., University of Northern lowa
Instructor of Teaching: Foreign Language - 1964 (2001)
D. Louis Finsand - B.S., University of Wisconsin-LaCrosse; M.A., University of Northern Iowa
Professor of Teaching: Science Education - 1964 (1997)
Adolfo Mariano Franco - B.A., Instituto de Cardenas, Cuba; Doctor in Law, Universidad de la Habana, Cuba; M.A., Ph.D., University of lowa
Professor of Spanish — 1967 (1993)
Mary L. Franken - B.S., University of Wisconsin-Stout; M.S., University of Wisconsin-Madison; Ed.D., Drake University
Professor of Design, Family and Consumer Sciences: Family Services - 1969 (1998)

Joseph E. Fratianni - B.S., Bridgewater State College; M.S., Ph.D., University of Wisconsin-Madison
Assistant Professor of Teaching
Coordinator of Student Teaching - 1971 (1991)
Arnold J. Freitag - B.S., Purdue University; M.S., Iowa State University Assistant Professor of Industrial Technology - 1968 (1991)
Gail E. Froyen - B.A., M.A., University of Northern Iowa
Instructor of Teaching: Educational Media - 1990 (1998)
Len A. Froyen - B.A., University of Northern Iowa; M.A., Mighican State University; Ed.D., Indiana University
Professor of Educational Psychology \& Foundations - 1958 (1994)
Sarah Frudden - B.A., M.A., Ed.S., University of Northern Iowa; Ph.D., Iowa State University; Ph.D., University of Wisconsin-Madison
Assistant Professor of Teaching and Coordinator of Student Teaching - 1974 (1992)

Joyce A. Gault - B.A., University of Northern Iowa; M.M., D.M., Northwestern University
Professor of Piano - 1957 (1993)
Albert R. Gilgen - B.A., Princeton University; M.A., Kent State University; Ph.D., Michigan State University
Professor of Psychology - 1973 (2001)
Charles C. Gillette - B.S., Iowa State University; M.A., University of Northern Iowa; Ph.D., Oklahoma State University
Associate Professor of Economics - 1966 (1991)
Rohert F. Gish - B.A., M.A., Ph.D., University of New Mexico
Professor of English — 1967 (1999)
George David Glenn - A.B., Shimer College; M.A., Northern Illinois University; Ph.D., University of Illinois
Professor of Theatre - 1966 (2000)
Ralph M. Goodman - B.A., M.A., Ph.D., University of California-Los Angeles
Associate Professor of English - 1964 (1988)
Robert C. Goss - B.S., Huntington College; M.S., Ph.D., Purdue University
Professor of Biology - 1961 (1991)
Jack E. Graham - B.M.E., Wichita State University; M.M., North Texas State University
Professor of Clarinet - 1967 (2004)
Donald W. Gray - A.B., Asbury College; B.D., Emory University; M.A.L.S., University of Minnesota

Associate Professor of Library
Assistant Director of Public Services - 1967 (1990)
Elton E. Green - B.S., M.S., Kansas State University; Ed.D., University of Northern Colorado
Professor of Physical Education - 1968 (1990)

Kenneth N. Green - B.S., lowa State University; M.A., University of Northern Iowa; Ed.D., University of Arkansas
Associate Professor of Physical Education - 1967 (2000)
Wanda K. Green - B.A., M.A., Ed.D., University of Northern Colorado Assistant Professor of Physical Education - 1967 (1998)
Leslie W. Hale - B.M.E., M.M.E., Drake University; M.A., University of Missourj-Kansas City; D.M.A., University of Missouri
Professor of Teaching - 1960 (1988)
G. Jon Hall - B.A., Central State College, Oklahoma; M.A., Ph.D., Southern Illinois University
Associate Professor of Communication Studies - 1973 (2001)
Fred W. Hallberg - B.A., M.A., University of Minnesota; M.S., Iowa State
University; Ph.D., University of Minnesota
Associate Professor of Philosophy - 1967 (1998)
Gaylon L. Halverson - B.A., Luther College; M.A., University of Northern Iowa; D.B.A., Indiana University; CPA
Professor of Accounting - 1963 (1997)
Albert C. Haman - B.A., University of Iowa; M.A., Michigan State University
Associate Professor of Biology - 1961 (1988)
Nellie D. Hampton - B.S., Central Missouri State University; M.A., State University of lowa; Ph.D., University of Wisconsin
Professor of Curriculum and Instruction - 1945 (1981)
James L. Handerf - B.A., University of Northern Iowa; M.A., Ph.D., University of Northern Colorado
Associate Professor of Business Education - 1966 (1990)
Glenn L. Hansen - B.A., M.A., University of Northern Iowa; Ph.D., Texas A\&M University
Associate Professor of Management
Dean of the Division of Continuing Education and Special Programs — 1964 (2001)
Jon Edward Hansen - B.A., M.A., University of Northern Iowa
Associate Professor of Trombone - 1969 (1993)
Thomas W. Hansmeier - B.A., M.A., University of Northern lowa; Ed.D., Michigan State University
Professor of Educational Administration and Counseling
Coordinator of Continuing Education, College of Education - 1971 (1991)

Alden B. Hanson - B.A., St. Olaf College; M.Ph., University of Wisconsin
Associate Professor of English
Foreign Student Advisor - 1946 (1975)
Roger J. Hanson - B.S., Gustavus Adolphus College; M.A., Ph.D., University of Nebraska
Professor of Physics - 1969 (1997)
James N. Hantula - B.A., M.A., University of Michigan
Associate Professor of Teaching: Social Studies - 1965 (1998)
Robert R. Hardman - B.S., Maryland State Teachers College; M.S., Ed.D., Indiana University
Professor of Curriculum and Instruction: Educational Technology
Director of Training Services, Information Technology Services - 1970 (1999)

Jeanne McLain Harms - B.A., M.A.E., Ed.S., University of Northern Iowa; Ph.D., Ohio State University;
Professor of Curriculum and Instruction: Elementary Reading and Language Arts - 1961 (1999)
Gordon M. Harrington - B.E.E., Georgia Institute of Technology; Ph.De Yale University
Professor of Psychology — 1963 (1992)
Judith F. Harrington - B.S., Boston College; M.A., University of Iowa
Assistant Professor of Speech-Language Pathology - 1965 (2003)

Robert A. Hartman - B.S., M.A., Ball State University
Director of Residence - 1977 (2004)
Virginia R. Hash - B.S., Iowa State University; M.A., Ed.S., University of Northern lowa; Ph.D., lowa State University
Director of Culture and Intensive English Program
Director of International Program Development - 1966 (1999)
Richard R. Hawkes - B.S., Municipal University of Omaha; M.S., University of Nebraska-Omaha; Ph.D., University of NebraskaLincoln
Professor of Teaching
Coordinator of Student Teaching - 1969 (2003)
Argelia C. Hawley - B.S., Kearney State College
Instructor of Teaching: Elementary Foreign Language - 1983 (1997)
D. C. Hawley - B.A.Ed., Kearney State College; M.A., Ph.D., University of lowa Professor of Spanish - 1966 (1998)
Marvin O. Heller - B.S., M.E., University of Nebraska; Ed.D., University of Northern Colorado
Professor of Curriculum and Instruction: Elementary Education - 1970 (1997)

Louis R. Hellwig - B.A., M.A., New Mexico State University; Ph.D., University of Missouri-Columbia
Assistant Professor of Psychology - 1964 (1997)
Bill Henderson - B.A., Central State College, Oklahoma; M.A., University of Houston; Ph.D., University of Minnesota
Associate Professor of Communication Studies - 1978 (2001)
Glen F. Henry - B.S., M.S., Nebraska State College-Chadron
Associate Professor of Physical Education - 1966 (2004)
Clifford H. Herrold - B.A., Central State University, Oklahoma; M.A., Colorado State University; Ed.D., Stanford University
Professor of Art - 1947 (1978)
Douglas M. Hieber - A.B., Cornell College; M.S.L.S., University of lllinois
Associate Professor and Head of Circulation - 1967 (1992)
Thomas W. Hill - B.S., University of Wisconsin; Ph.D., University of Pennsylvania
Professor of Anthropology - 1972 (2002)
Joseph F. Hohlield - B.A., Hastings College; M.B.S., University of Colorado; Ed.D., Indiana University
Associate Professor of Teaching: Mathematics - 1978 (1988)
A. John Holstad - B.S., Northern State College, South Dakota; M.M., D.M., Northwestern University

Associate Professor of Piano - 1962 (1999)
Joyce J. Hornby - B.A., Northwestern College-Minneapolis; B.A., University of Minnesota-Duluth; M.A., University of Northern Colorado; Ed.S., University of Wyoming
Assistant Professor of Teaching: Elementary Education - 1973 (1991)
Max M. Hosier - B.A., Nebraska State Teachers College, Peru; M.A., Ed.D., University of Northern Colorado
Professor of Curriculum and Instruction: Reading - 1951 (1988)
Grace Ann Hovet - B.A., College of St. Catherine; M.A., University of Minnesota; Ph.D., University of Kansas
Professor of English - 1969 (1999)
Theodore R. Hovet - B.S., North Dakota State College; M.A., University of Minnesota; Ph.D., University of Kansas
Professor of English - 1969 (1999)
Sharon Huddleston - B.S., M.Ed., Stephen F. Austin State University; Ph.D., University of Iowa
Professor of Physical Education - 1973 (2003)
Gerald W. Intemann - B.S., M.S., Ph.D., Stevens Institute of Technology
Professor of Physics - 1980 (2000)
Dean of the College of Natural Sciences - (1991-2000)

Margarat F. Ishler - B.A., M.A., Pennsylvania State University; Ed.D., University of Toledo
Professor of Curriculum and Instruction: Elementary Education - 1990 (2000)

Dale R. Jackson - B.S.Ed., M.S.Ed., Ed.S., Western Illinois University; Ed.D., Northern Illinois University
Professor of Educational Leadership, Counseling, and Postsecondary Education - 1987 (2002)
Vivian R. Jackson - B.A., Rosary College; M.Ed., DePaul University; Ph.D., Northwestern University
Associate Professor of Educational Leadership, Counseling, and Postsecondary Education
Associate Dean for Student Services, Graduate College - 1990 (2002)
Mary Ann Jackson - B.S., M.S., University of Arkansas
Assistant Professor of Teaching - 1953 (1981)
Edward Jamosky - B.A., M.A., M.A., University of Wisconsin
Assistant Professor of Russian - 1965 (1994)
Carl R. Jenkins - B.A., M.A., University of Northern lowa
Assistant Director of Broadcasting/Programming - 1962 (1976)
John H. Jennett - B.S., M.A., Drake University
Associate Professor of Physical Education for Men - 1962 (1976)
Marvin D. Jensen - B.A., Midland Lutheran College; M.A., University of Kansas
Assistant Professor of Communication Studies - 1966 (2000)
Verner Jensen - B.S., University of Nebraska; M.S., Iowa State University
Professor of Physics - 1956 (1991)
Valdon L. Johnson - B.A., M.A., University of Northern lowa
Assistant Professor of English - 1968 (1994)
Howard V. Jones - B.A., M.A., Ph.D., Harvard University
Professor of History - 1954 (1991)
Elaine B. Kalmar - B.A., M.A., Ph.D., University of New Mexico
Associate Professor of English - 1971 (1999)
John J. Kamerick - B.A., St. Ambrose; M.A., Ph.D., University of Iowa
Professor of History - 1970 (1986)
President (1970-1983)
Lawrence L. Kavich - B.S., M.S., Ed.D., University of California-Los Angeles
Professor of Educational Psychology and Foundations - 1977 (1994)
Lawrence W. Kieffer - B.A., M.A., University of Minnesota
Associate Professor and Head of Reference Department - 1969 (1996)
Carey H. Kirk - B.A., Princeton University; M.A., University of Virginia; Ph.D., Vanderbilt University; J.D., University of Iowa
Assistant Professor of Law and Management - 1983 (2004)
Aurelia L. Klink - B.A., M.A., University of Northern Iowa
Director of Non-Credit Programs
Assistant Professor of Management - 1966 (2002)
Howard T. Knutson - B.A., Luther College; M.A., Ed.D., University of Wyoming
Professor of Educational Administration and Counseling - 1953 (1981)
Director of Teacher Education
Dean of the College of Education - (1968-1976)
Fritz H. Konig - B.A., University of Heidelberg; Candidatus Magisterii, University of Oslo; M.A., Ph.D., University of Iowa
Professor of German - 1967 (2002)
Robert E. Kramer - B.A., M.A., University of North Dakota
Assistant Professor of Sociology - 1965 (1998)
Marilou DeWall Kratzenstein - B.A., Calvin College; M.A., Ohio State University; D.M.A., University of Iowa
Professor of Organ and Music History - 1975 (2002)

Marian E. Krogmann - B.S., South Dakota State University; M.A., Ph.D., University of Iowa
Associate Professor of Political Science - 1967 (1995)
Raymond Kuehl - B.A., Upper Iowa University; M.A., University of Iowa; Ed.S., Drake University; Ph.D., University of Iowa
Professor of Teaching and Coordinator of Student Teaching - 1966 (1988)

Loretta S. Kuse - B.S., University of Wisconsin-Stevens Point; M.A., Ph.D., University of Iowa; M.Div., Wartburg Theological Seminary
Assistant Professor of Curriculum and Instruction: Elementary Education - 1972 (2001)
Geraldine E. LaRocque - B.S., M.A., University of Minnesota; Ph.D., Stanford University
Professor of English
University Liaison for Teacher Education - 1973 (1991)
James P. LaRue - B.S., Southeast Missouri State College; M.A., Colorado State College of Education; Ed.D., Pennsylvania State University
Professor of Industrial Technology - 1956 (1986)
Robert D. Leahy - B.S., Valparaiso University, Indiana; M.A. University of lowa
Registrar - 1976 (1991)
Key Ton Lee - B.A., Union College, Nebraska; M.A., Andrews University, Michigan; Ph.D., University of Oklahoma
Professor of Educational Psychology and Foundations - 1967 (1994)
Robert T. Lembke - B.S., M.S., Mankato State College; Ed.D., University of South Dakota
Associate Professor of Educational Administration and Counseling - 1974 (1993)

William W. Lew - B.A., Central Washington State College; M.F.A., University of Oregon; Ph.D., Ohio University
Professor of Art
Head of the Department of Art - 1985 (1998)
Thomas L. Little - B.A., Macalester College; M.Ed., University of Mississippi; Ed.D., Memphis State University
Associate Professor of Special Education - 1973 (2004)
Bonnie H. Litwiller - B.S.Ed., M.S.Ed., Illinois State University; M.A.T., Ed.D., Indiana University
Professor of Mathematics - 1968 (2003)
John C. Longnecker - B.A., M.A., University of Northern Iowa
Assistant Professor of Mathematics - 1966 (1999)
Jonathan J. Lu - B.Ed., Taiwan Normal University; B.D., Asbury Theological Seminary; M.A., Ohio State University; Ph.D., University of Washington
Professor of Geography - 1973 (1992)
H. Lewis Lynch - B.S., M.Ed., University of Nebraska; D.Ed., University of Wyoming
Associate Professor of Teaching
Coordinator of Student Teaching - 1951 (1987)
Howard W. Lyon - B.A., M.S., University of Iowa
Assistant Professor of Chemistry - 1956 (1992)
James G. Macmillan - B.A., Western Washington State College; Ph.D., Ohio State University
Associate Professor of Chemistry - 1972 (2001)
H. Kent Macomber - B.S., M.S., University of California-Berkeley; Ph.D., Harvard University
Professor of Physics - 1976 (2000)
Jeanette J. Marsh - B.S., Mankato State College; M.S., University of New Mexico; Ph.D., University of Minnesota
Assistant Professor of Physical Education - 1975 (2002)

Elizabeth A. Martin - B.A., Wartburg College; M.A., University of Minnesota
Associate Professor of Curriculum and Instruction: Library Science
Head of the Department of Library Science - 1962 (1991)
A. Marleta Matheson - B.M.E., Simpson College; M.M., University of Michigan
Associate Professor of Group Piano and Accompanying - 1964 (1991)
Charles D. Matheson - B.M., M.M., University of Michigan
Professor of Voice - 1955 (1982)
Jvone A. Maxwell - B.A., University of Northern Iowa; M.M., American Conservatory of Music
Associate Professor of Piano - 1940 (1978)
David V. McCalley - B.A., M.A., University of Northern Iowa; Ed.D., University of Northern Colorado
Professor of Biology and Science Education - 1966 (1999)
Clifford G. McCollum - B.S., M.A., Ed.D., University of Missouri
Professor of Biology — 1949 (1984)
Dean of the College of Natural Sciences - (1968-1984)
Norman L. McCumsey - B.S., Oregon College of Education; M.Ed., University of Oregon; Ed.D., Colorado State College
Associate Professor of Educational Administration and Counseling - 1967 (1993)

Daniel L. McDonald - B.S., M.S., Ed.D., Oklahoma State University
Assistant Professor of Leisure, Youth and Human Services - 1985 (2002)
G. Douglas McDonald - B.S., University of Pennsylvania; M.S., University of Minnesota
Assistant Professor of Marketing - 1963 (1973)
LeRoy A. McGrew - B.A., Knox College, Illinois; M.S., Ph.D., University of Iowa
Professor of Chemistry - 1977 (2003)
Kent A. McIntyre - B.A., University of Iowa; M.A., University of Denver
Associate Professor of Teaching: Educational Media - 1968 (1990)
Keith F. McKean - A.B., Williams College; M.A., University of Chicago; Ph.D., University of Michigan
Professor of English — 1968 (1980)
Charles L. Means - B.S., Southern Illinois University; M.A., Webster College; Ph.D., St. Louis University
Adjunct Associate Professor of Educational Psychology and Foundation Associate Vice President for Academic Affairs - 1983 (2004)
Director of Educational Opportunity Programs and Special Communit/| Services
Josephine J. Megivern - B.A., M.A., University of Northern Iowa Assistant Professor of Home Economics - 1967 (1987)
Jane C. Mertesdorf - B.S., Mankato State College; M.A., Ball State University; Ph.D., Iowa State University
Assistant Professor of Leisure Services - 1966 (2000)
Coordinator of Leisure Services Division - (1993-2000)
Hattie M. Middleton - B.S., Florida A\&M University; M.A., University of Northern Iowa; Ph.D., Kansas State University
Assistant Professor of Design, Family and Consumer Sciences: Nutrition, Food Science and Dietetics - 1988 (2000)
Michael H. Millar - B.A., Harvard University; M.S., Ph.D., University of Chicago
Professor of Mathematics - 1962 (2000)
David L. Morgan - B.A., Swarthmore College; M.A., Washington University, St. Louis
Assistant Professor of Philosophy - 1965 (2004)
Janice M. Morgan - B.S., M.Ed., University of Missouri-Columbia; Ph.D., Iowa State University
Associate Professor of Design, Family and Consumer Sciences: Family Services - 1972 (1998)

Robert E. Morin - B.A., M.S., Northwestern University; Ph.D., University of Wisconsin-Madison
Professor of Psychology — 1972 (1986)
Dean of the College of Social and Behavioral Sciences - (1972-1985)
Raul Munoz - B.A., M.A., University of Nebraska; M.A., Ph.D., Michigan State University
Professor of Spanish - 1963 (1996)
Gretchen M. Myers - B.A., University of Iowa; M.A.L.S., Rosary . College
Assistant Professor and Reference Librarian - 1967 (1989)
Judy L. Myers - B.A., University of Iowa; M.A., University of Wisconsin
Assistant Professor and Catalog Librarian - 1967 (1996)
Hyo C. Myung - B.S., M.S., Seoul National University, Korea; Ph.D., Michigan State University
Professor of Mathematics - 1970 (1998)
Phillip J. Nelson - B.S., Augustana College, South Dakota; M.A., University of Nebraska-Omaha
Assistant Professor of Teaching: Social Studies - 1969 (2000)
Richard S. Newell - B.A., M.A., University of Washington; Ph.D., University of Pennsylvania
Professor of History - 1967 (1995)
Samuel Nodarse - B.A., Colegio de la Salle (Havana); Doctorate of Social Sciences, Doctorate of Law, Universidad de la Habana, Cuba; Ph.D., University of Illinois- Urbana
Professor of Spanish - 1964 (1988)
Lowell Norland
Director, Iowa Training Opportunities Program, Business and Community Services - 1987 (2004)
Michael David Oates - A.B., Fairfield University; M.A.T., Assumption College; Ph.D., Georgetown University
Professor of French - 1967 (2003)
Earl G. Ockenga - B.S., Augustana; M.S., University of South Dakota
Associate Professor of Teaching: Mathematics - 1988 (1999)
Karl Edward Odwarka - Diploma, Akademie fuer Welthandel, Frankfurt; A.B., M.A.T., Wayne State University; Ph.D., University of Michigan
Professor of German - 1964 (1991)
Jons C. Olsson - B.A., Thiel College
Assistant Director of Broadcasting/Development - 1978 (2000)
Alan R. Orr - B.A., Simpson College; M.S., Ph.D., Purdue University
Professor of Biology - 1965 (1998)
John H. Page - B. of Design, University of Michigan; M.FA., University of Iowa
Professor of Art — 1954 (1987)
Eugenia G. Parisho - B.A., University of Northern Iowa; M.A., University of Chicago
Assistant Professor of Teaching: Elementary Education — 1968 (1989)
Barbara E. Pershing - B.S., Western Illinois University; M.A., University of Northern Colorado; Ph.D., Iowa State University
Associate Professor of Design, Family and Consumer Sciences: Management and Consumer Studies and Family Services - 1971 (1996)

Rex W. Pershing - B.S., Western Illinois University; M.A.Ed., University of Northern Iowa; Ed.D., University of Northern Colorado
Associate Professor of Industrial Technology - 1965 (1992)
Warren E. Picklum - B.A., Colorado State University; M.S., Ph.D., lowa State University
Associate Professor of Biology - 1957 (1987)
Douglas T. Pine - B.S., State University of New York-Oswego; M.A., Trenton State College; Ph.D., Ohio State University
Associate Professor of Industrial Technology - 1973 (2000)

Paul J. Porter - B.A., M.A., Ed.S., University of Northern lowa; Ed.D., Drake University
Associate Professor of Educational Psychology and Foundations - 1967 (1997)

James Price - B.S.Ed., A.B.; University of Missouri; M.A.Ed., University of Northern Iowa
Assistant Professor of Teaching: Foreign Language - 1963 (1983)
Joseph Przychodzin - B.Ed., Southern Illinois University; M.A., University of Illinois; Ed.D., University of Missouri
Professor of Educational Psychology and Foundations - 1947 (1980)
Charles E. Quirk - B.A., Carroll College, Wisconsin; B.Div., McCormick Theological Seminary-Chicago; Ph.D., University of lowa
Associate Professor of History - 1963 (2001)
Lora Lee Rackstrew - B.A., Grinnell College; M.F.A., University of lowa
Associate Professor of English - 1966 (1996)
Med H. Ratekin - B.A., Parsons College; M.A., Ph.D., University of lowa
Professor of Curriculum and Instruction: Reading - 1965 (1992)
Jack C. Reed -B.A., M.A., University of Northern lowa; Ed.D., University of Nebraska-Lincoln
Associate Professor of Business Education - 1965 (1990)
Dennis L. Remmert - B.A., M.A., University of Northern lowa
Assistant Professor of Physical Education - 1964 (2001)
Coordinator of General Education - 1997
Erwin W. Richter - B.S., Northern Michigan University; M.A., University of Northern lowa; Ph.D., University of lowa
Professor of Chemistry - 1963 (1996)
Dixon L. Riggs - B.A., Marietta College; M.S., University of Michigan
Associate Professor of Biology - 1958 (1987)
Verna F. Ritchie - B.A., Hunter College; M.A., McGill University; M.A.L.S., University of Michigan

Professor and Art and Music Librarian - 1966 (1991)
Janet M. Rives - B.A., University of Arizona; M.A., Ph.D., Duke University
Professor of Economics - 1984 (2004)
James B. Roberson - B.S., Middle Tennessee State Teachers College; M.A., George Peabody College for Teachers

Associate Professor of Teaching - 1964 (1984)
Coordinator of Student Teaching
Ronald E. Roberts - B.A., Drake University; M.A., Ph.D., Louisiana State University
Professor of Sociology - 1969 (2001)
Bruce G. Rogers - B.A., M.A., Arizona State University; Ph.D., Michigan State University
Professor of Educational Psychology and Foundations - 1975 (2004)
Mary H. Rohrberger - B.A., Newcomb College; M.A., Ph.D., Tulane University
Professor of English - 1990 (1997)
Thomas P. Romanin - B.S., M.A., Kent State University; Ph.D., St. Louis University
Associate Vice President for Educational and Student Services - 1976 (2004)

Associate Professor of Educational Leadership, Counseling, and Postsecondary Education
Robert L. Ross - B.A., University of Northern Iowa; M.A., Columbia University; Ph.D., Michigan State University
Professor of Political Science - 1962 (1996)
Betts A. Roth - B.S., George Peabody College for Teachers; M.A., Columbia University
Associate Professor of Teaching: Early Childhood Education - 1951 (1976)

Clair D. Rowe - B.A., M.A., University of Northern lowa; Ph.D., University of Iowa
Professor of Marketing - 1986 (1991)
Robert L. Rule - B.S., M.S., Ph.D., Iowa State University
Assistant Professor of Mathematics - 1966 (1998)
Edward Rutkowski - B.S., Marquette University; M.A., Ph.D., Michigan State University
Professor of Educational Psychology and Foundations - 1963 (1990)
Thomas G. Ryan - B.S.C., M.A., University of Iowa
Associate Professor of History - 1960 (1993)
Roy E. Sandstrom - A.B., Williams College; M.A., Ph.D., State University of New York-Buffalo
Associate Professor of History - 1969 (2004)
Otis R. Schmidt - B.J., M.J., University of Texas-Austin; M.A., Sam Houston State College
Assistant Professor of English Language and Literature - 1965 (1988)
Donald W. Schmits - B.A., University of Evansville; M.A., Southern Illinois University; Ed.D., Rutgers University
Associate Professor of Educational Psychology and Foundations - 1976 (2004)
N. Marshall Schools - B.S., Mary Washington College; M.A., George Peabody College for Teachers
Associate Professor of Teaching: Physical Education - 1949 (1976)
Augusta Schurrer - B.A., Hunter College; M.A., Ph.D., University of Wisconsin-Madison
Professor of Mathematics - 1950 (1997)
Lynn C. Schwandt - B.A., Coe College; M.A., University of Northern Iowa; M.A., Stanford University -
Professor of Teaching: Mathematics - 1964 (1992)
Jane K. Sherwin Schwartz - B.A., Rockford College; M.A., Middlebury College; Ph.D., University of Michigan
Professor of French — 1962 (1991)
Archana Daya Shankar - B.A., Agra University; M.S., Ph.D., Ohio University
Associate Professor of Communication Studies - 1994 (2004)
Allan R. Shickman - B.F.A., Washington University-St. Louis; M.A., University of lowa
Associate Professor of Art - 1970 (1999)
Carolyn L. Shields - B.A., Ph.D., University of Texas-Austin
Associate Professor of English - 1976 (2002)
Edna Anderson Shores - B.S., M.A., Teachers College of Columbia University
Assistant Professor of Home Economics - 1947 (1973)
Vera Jo Siddens - B.A., M.A., University of Northern Iowa
Professor of Art - 1968 (1997)
Robert J. Simpson - B.A., Houghton College; M.S., Ph.D., University of Illinois
Associate Professor of Biology - 1965 (1992)
Jemes C. Skaine - B.A., Sioux Falls College; M.A., University of South Dakota
Assistant Professor of Communication Studies - 1965 (1998)
Joseph J. Smaldino - B.S., Union College, New York; M.A., University of Connecticut; Ph.D., University of Florida
Professor of Audiology - 1984 (2003)
David T. Smalley - B.M., M.M., University of Michigan
Associate Professor of Voice - 1964 (2002)
Audrey L. Smith - A.B., Kentucky Wesleyan College; M.A., Northwestern University; M.A.Ed., Ed.D., Ball State University
Assistant Professor of Educational Leadership, Counseling, and Postsecondary Education - 1973 (1998)

Joanne K. Spaide - B.S., University of Illinois; M.S., Ph.D., University of Iowa
Associate Professor of Design, Family and Consumer Sciences: Nutrition, Food Science and Dietetics - 1974 (1998)
Richard G. Stahlhut - B.A. Northern Illinois University; M.A., Western Michigan University; Ph.D., University of lowa
Associate Professor of Teaching - 1969 (2004)
Coordinator of Student Teaching
Susan B. Stainback - B.S., Radford College, Virginia; M.Ed., Ed.D., University of Virginia
Professor of Special Education - 1974 (1998)
Myrtle M. Stone - B.A., Washington State University; M.B.A., University of Washington; Ed.D., New York University
Professor of Teaching - 1928 (1966)
Norman L. Story - B.A., David Lipscomb College; M.A., Western Michigan University; Ph.D., California School of Professional Psychology
Director of the Counseling Center
Counselor/Psychologist - 1968 (1992)
Charles T. Strein - B.A., University of Northern Iowa; M.A.T., Purdue University; M.A., Ph.D., University of Illinois
Associate Professor of Economics - 1970 (2000)
Elizabeth J. Strub - B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching: Elementary Education - 1972 (1993)
Richard F. Strub - B.A., University of Northern Iowa; M.A., Colorado State College; Ed.D., University of South Dakota
Associate Professor of Educational Administration and Counseling - 1964 (1992)

Coordinator of Minority Recruitment - (1989-1992)
Godfrey (Garf) Stych - B.S.P.E., M.A., University of lowa
Assistant Professor of Physical Education - 1966 (1991)
Alvin R. Sunseri - B.A., Southeastern Louisiana University; M.A., Ph.D., Louisiana State University
Professor of History - 1967 (1988)
Betty M. Swanson - B.S., University of Minnesota; M.S., University of Southern California
Assistant Professor of Physical Education - 1949 (1985)
Alice L. Swensen - B.A., University of Iowa; M.A., Ph.D., Oklahoma State University
Associate Professor of English - 1978 (1998)
Thomas J. Switzer - B.A., University of Northern Iowa; Ph.D., University of Michigan
Dean of the College of Education
Professor of Education - 1987 (2003)
Robert D. Talbott - A.B., A.M., Ph.D., University of Illinois, UrbanaChampaign
Professor of History - 1967 (1996)
John E. Tarr - B.S.C., University of Iowa; M.A., University of Northern Iowa; Ph.D., University of Iowa
Professor of Teaching: Mathematics - 1961 (1998)
Nick E. Teig - B.A., M.A., University of Northern Iowa; Ed.D., University of Nebraska-Lincoln
Associate Professor of Teaching: Driver Education - 1967 (1999)
Coordinator of Student Teaching
E. Russell TePaske - B.A., Westmar College; M.A., University of Northern Iowa; Ph.D., Oklahoma State University
Professor of Biology - 1963 (1989)
Shivesh C. Thakur - B.A., M.A., Patna University, India; Ph.D., University of Durham, England; Diploma, University of Oxford, England
Professor of Philosophy - 1984 (1999)

Leland A. Thompson - B.A., M.A., University of Northern Iowa; Ed.D., University of Denver
Director of Campus Planning - 1968 (1992)
Marion R. Thompson - B.S., M.S., Southern Illinois University; Ed.D., Illinois State University
Professor of Special Education - 1978 (1999)
Thomas H. Thompson - B.A., M.A., Ph.D., University of Iowa
Professor of Philosophy - 1952 (1994)
William R. Thrall - B.S., Wisconsin State University-LaCrosse; M.S.3 University of Colorado; Ph.D., University of Iowa
Professor of Health, Physical Education and Leisure Services: Physical Education
Director of the School of Health, Physical Education and Leisure Services - 1960 (1991)
Paul Trafton - B.S., Wheaton College; M.S.E., Northern Illinois University; Ph.D., University of Michigan
Professor of Mathematics and Early Childhood - 1991 (2003)
Jean Ann Trout — B.S.Ed., Wittenberg University; M.A., Ball State University; Ed.D., Indiana University
Associate Professor of Educational Psychology and Foundations - 1970 (1991)

Roy D. Unruh - B.A., Bethel College; M.A., University of Minnesota; Ed.D., University of Northern Colorado
Professor of Physics and Science Education - 1967 (2001)
Howard VanderBeek - B.A., University of Iowa; M.A., Ed.D., Columbia University
Professor of Teaching - 1948 (1981)
Marjorie F. Vargas - B.S., M.S., University of Wisconsin
Assistant Professor of Teaching: Language Arts - 1964 (1998)
Douglas L. Vernier - B.A., M.A., University of Michigan
Director of Broadcasting Services
Assistant Professor of Radio/Television - 1972 (2003)
Francis D. Vilmain - B.A., University of Northern Iowa; M.S., University of Wisconsin
Professor of Physics - 1965 (1988)
Edward V. Voldseth - B.A., University of Montana; M.A., Teachers College, Columbia University; Ph.D., University of Iowa
Vice President for University Relations and Development - 1964 (1988)
William L. Waack - B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Professor of Curriculum and Instruction
Director of Teacher Education - 1977 (1998)
Edward F. Wagner - B.S., University of Wisconsin; B.S., Wisconsin State College, Eau Claire; M.A.L.S., University of Wisconsin
Associate Professor and Interlibrary Loan Librarian - 1958 (1995)
Willis H. Wagner - B.S., Central Missouri State University; M.A., University of Missouri
Professor of Industrial Technology - 1945 (1982)
Robert J. Waller, Jr., - B.A., M.A., University of Northern Iowa; D.B.A., Indiana University

Professor of Management (Decision Making) - 1968 (1998)
Stanley J. Walljasper - B.AっM.S., Ph.D., University of Iowa
Associate Professor of Computer Science - 1975 (1996)
Andre G. Walther - B.A., University of Northern Iowa; M.A., Michigan State University
Assistant Professor of French — 1964 (1996)
Donald R. Walton - B.A., St. Ambrose College; M.A., University of Northern Iowa
Recruitment and Classification Specialist/Professional \& Scientific - 1966 (1993)

Robert T. Ward - B.A., Amherst College; M.A., Ph.D., Harvard University
Associate Professor of Physics and Science Education - 1975 (1999)
Carl O. Wehner - B.A., M.A.Ed., University of Northern Iowa
Assistant Professor of Computer Science - 1961 (1992)
Wanda P. Wehner - B.A., M.A., University of Northern Iowa
Assistant Professor of Chemistry - 1966 (1992)
Margaret Weiser - B.A., Douglass College, Rutgers; M.S., Florida State University; Ed.D., University of Illinois
Professor of Curriculum and Instruction: Early Childhood Education - 1991 (1993)

Joel W. Wells - B.S., Ohio University; M.A., Western Carolina University; Ph.D., University of Connecticut
Professor of Design, Family and Consumer Sciences: Family Services - 1981 (2001)

Donald B. Wendt - B.M., Northwestern University; M.A., University of Northern Iowa
Associate Professor of Woodwinds - 1958 (1989)
David A. Whitsett - B.A., Pennsylvania State University; M.S., Ph.D., Case Western Reserve University
Professor of Psychology - 1974 (2001)
Donald E. Wiederanders - B.S., Wartburg College; M.A., University of Minnesota
Professor of Teaching: Mathematics - 1958 (1991)
Jack L. Wielenga - B.A., M.A., Ed.S., University of Northern Iowa
Student Records and Retention Director - 1959 (1998)
Sandra C. Williamson - B.S., M.S., Eastern New Mexico University; Ed.D., University of Northern Colorado
Associate Director of Athletics/Senior Woman Administrator - 1978 (2004)

Nixon A. Wilson - B.A., Earlham College; M. Wildlife Management, University of Michigan; Ph.D., Purdue University
Professor of Biology — 1969 (1997)
Robley C. Wilson, Jr. - B.A., Bowdoin College; M.F.A., University of Iowa; D.Litt., Bowdoin College
Editor, North American Review - 1963 (2000)
Dorothy Wineke - B.S., M.S., University of Wisconsin
Instructor of Teaching: Art - 1949 (1982)
Francis J. Winter - B.A., University of Dubuque; M.A., Ph.D., University of Iowa
Assistant Professor of Political Science - 1965 (1996)
Harold B. Wohl - B.A., M.A., Ph.D., University of Iowa
Professor of History - 1956 (1995)
Joanne Wolfe - B.A., M.A., University of Northern Iowa
Assistant Professor of Teaching: Elementary Education - 1967 (1995)
Ching S. Woo - B.A., Cornell University, New York; M.S., University of Michigan; Ph.D., University of Kentucky
Professor of Chemistry - 1967 (1998)
Evelyn S. Wood - A.B., Marshall University; M.A., University of Michigan
Associate Professor of English — 1966 (1992)
Barbara Yager - B.S., M.A., Ohio State University; Ed.D., University of Southern California
Professor of Physical Education - 1949 (1985)
H. Marcus Yoder - B.A., Bethel College, Kansas; M.A., Ph.D., University of Iowa
Associate Professor of Curriculum and Instruction: Elementary Education - 1971 (1998)
George K. Zucker - B.A., Queens College, New York; M.A., Ph.D., University of Iowa
Professor of Spanish — 1968 (2001)

## 2004-2006 Faculty

*Fred J. Abraham - B.S., University of Wisconsin-LaCrosse; M.S., University of Wisconsin-Madison; M.A., Ph.D., University of Oregon
Professor of Economics - 1973 (1988)
Head of the Department of Economics - 1992
Ronald J. Abraham - B.B.A., M.B.A., University of WisconsinMadison; CPA
Assistant Professor of Accounting - 1974
*Charles M. Adelman - A.B., Brooklyn College; Ph.D., University of Chicago; Ph.D., University of Gothenburg, Sweden
Associate Professor of Art - 1983 (1985)
*Pita O. Aghese - B.Sc., Ahmadu Bello University; M.A., Northwestern University; M.B.A., Keller Graduate School of ManagementChicago; Ph.D., Northwestern University
Professor of Political Science - 1989 (1998)
*Martin Agran - B.A., City College of New York; M.A., University of Rochester; M.S., Western Oregon State College; Ph.D., University of Illinois-Urbana-Champaign
Professor of Special Education - 1999
Interim Head of Department of Special Education-2003
Jalaluddin Ahmad-B.Sc. Univerșity of Engineering and Technology, Pakistan; M.S., Quaid-I-Azam University, Pakistan; M.S., Ph.D., University of Houston
Assistant Professor of Industrial Technology-2001
*Iradge Ahrabi-Fard - B.A., M.A., University of Northern Iowa; Ph.D.,
University of Minnesota
Professor of Physical Education - 1972 (1984)
Howard Aibel - B.S., M.S., Juilliard School of Music
Professor of Piano - 1978 (1984) '
*Muhammad Imam Alam - B.S., M.S., University of Dhaka, Bangladesh; M.A., University of Houston; Ph.D., University of Illinois, Urbana-Champaign
Associate Professor of Economics - 1996 (2003)
Ronald L. Albrecht-B.A., University of Northern Iowa
Lieutenant Colonel and Assistant Professor of Military Science - 2000
Susan N. Allbee - B.A., M.A., University of Northern Iowa
Instructor of Sociology - 1989
Barhara F. H. Allen - B.A., Wartburg College; M.A., University of lowa; M.A. University of Northern Iowa

Associate Professor and Reference Librarian - 1989 (1999)
*Radhi H. AI-Mabuk - B.A., St. Mary's College-Winona; M.S., Winona State University; Ph.D., University of Wisconsin-Madison
Associate Professor of Educational Psychology and Foundations - 1990 (1996)
*Sandra K. Alper - B.S., M.A., Ph.D., University of Iowa
Professor of Special Education-1994
Associate Dean for Graduate Studies and Sponsored Research, College of Education-2004
Shahina Amin-B.S., M.S., University of Dhaka, Bangladesh; M.A., University of Houston; Ph.D., University of Illinois, UrbanaChampaign
Assistant Professor of Economics-2000
LaVerne W. Andreessen - B.A., M.A., University of Northern Iowa; CPA
Assistant Professor of Accounting - 1980
Alan W. Asher-B.M., West Texas State University; M.M.., The Cleveland Institute of Music; D.M. Florida State University; M.L.S., Texas Woman's University
Assistant Professor and Art and Music Librarian and Bibliographer2002
*Kenneth R. Atkinson - B.A., Oakland University; M.Div., University of Chicago; M.A., Ph.D., Temple University
Assistant Professor of Religion - 1999
Jason A. Aubrey-B.S., Purdue University; M.S., Ph.D., University of Michigan
Assistant Professor of Mathematics-2003
*Carolyn R. Bair - BA., M.A., Northern Michigan University; Ph.D., Loyola University
Assistant Professor of Educational Leadership, Counseling and Postsecondary Education - 1998
*Phyllis L. Baker - B.A., San Diego State University; M.A., Ph.D., University of California-San Diego
Associate Professor of Sociology - 1990 (1997)
Associate Dean of the College of Social and Behavioral Sciences - 1999
John Balong-B.A., Loras College, M.S., University of lowa
Instructor of Modern Languages-2003
Megan E. Balong - B.A., M.A., University of Northern lowa
Instructor of Teaching: Mathematics, Price Laboratory School - 1999
*Ronnie G. Bankston - B.A., Baylor University; M.S., Oklahoma State University; Ph.D., University of Iowa
Associate Professor of Electronic Media - 1991 (1995)
*Howard L. Barnes - B.A., Macalester College; M.S., Kansas State University; Ph.D., University of Minnesota
Associate Professor of Design, Family and Consumer Sciences
Head of the Department of Design, Family and Consumer Sciences - 1997

Bradley T. Barrett-B.S., M.S., Southwest Missouri State; D.M.A., University of Arizona
Assaciate Professor of Choral Conducting and Music Education-2002
Carolya G. Barrientes-A.A., San Antonio College; B.A., University of Texas at Austin; M.F.A., University of Iowa
Assistant Professor of Design, Family and Consumer Sciences: Interior Design-2001
*Francisco X. Barrios - A.B., St. Louis University; M.A., Ph.D., University of Cincinnati
Professor of Psychology — 1979 (1989)
Head of the Department of Psychology - 2001
Thomas M. Barry - B.M.E., M.M., University of Colorado
Assistant Professor of Oboe and Saxophone - 1973 (1976)
"Duane E. Bartak - B.A., Emporia State University; Ph.D., Kansas State University
Professor of Chemistry-1992
"Clemens Bartollas - B.A., Davis and Elkins College; B.D., Princeton Theological Seminary; S.T.M., San Francisco Theological Seminary; Ph.D., Ohio State University
Professor of Sociology - 1981 (1985)
*John D. Baskerville - B.A., Tarkio College; M.A., Ph.D., University of Iowa
Assistant Professor of History - 1993 (1997)
*Ann Marie (Maria) Basom - B.A., University of Minnesota; M.A., Ph.D., University of Wisconsin-Madison
Associate Professor of Russian - 1994 (1996)
Head of the Department of Modern Languages - 1998
*Kenneth E. Basom - B.A., Earlham College; M.A., Ph.D., University of Wisconsin-Madison
Associate Professor of Political Science - 1991 (1996)
*Brenda L. Bass - B.A., California State University-Bakersfield; M.S., Ph.D., University of Arizona
Associate Professor of Design, Family and Consumer Sciences: Family Services - 1996 (2003)
*Kenneth E. Baughman — B.A., Lawrence University; M.A., Ph.D., University of Chicago
Assistant Professor of English - 1972
*Melissa L. Beall - B.S., M.A., Ph.D., University of Nebraska
Professor of Communication Studies - 1990 (1994)
Aricia M. Beckman-B.A., M.A., University of Northern lowa
Instructor of Teaching: Elementary, Secondary Resource Program, Price Laboratory School-1983 (2002)
*Penny L. Beed - B.S., Iowa State University; M.A., Ph.D., University of Iowa
Associate Professor of Curriculum and Instruction: Literacy Education - 1992 (1998)
*Roy R. Behrens - B.A., University of Northern Iowa; M.A., Rhode Island School of Design
Professor of Art - 1990
*Fered on (Fred) Behroozi - B.S., University of Washington-Seattle; Ph.D., University of Pittsburgh
Professor of Physics-1992
*Lisa A. Beltz - B.A., Malone College; Ph.D., Michigan State University
Associate Professor of Biology - 1995 (2001)
*Thomas R. Berg - B.A., M.A., Ph.D., Ohio State University
Associate Professor of Educational Psychology and Foundations - 1972 (1980)
*Virginia A. Berg - B.S., Tufts University; M.S., Ph.D., University of Washington
Professor of Biology - 1984 (1992)
*Gretta L. Berghammer - B.A., University of Wisconsin-Green Bay; M.F.A., University of Texas-Austin

Professor of Theatre - 1984 (1997)
*Barton L. Bergquist - B.S., North Park College; M.S., Northeastern Illinois University; Ph.D., University of Kansas
Professor of Biology — 1978 (1992)
Acting Head of the Department of Computer Science-2000
David H. Berman - B.A., Carleton College; M.A., Ph.D., University of Wisconsin-Madison
Associate Professor of Physics - 2000
Maureen M. Berner-B.A., University of Iowa; M.P.P., Georgetown University; Ph.D., University of Texas-Austin
Assistant Professor of Political Science-2003
Fred Besthorn-B.S., Sterling College; M.Div., Grace Theological Serninary; M.S.W., Ph.D., University of Kansas
Associate Professor of Social Work-2002 (2003)
Maribelle H. Betterton - B.A., M.A., University of Northern Iowa
Assistant Professor of Curriculum and Instruction: Literacy Education - 1973 (1976)

Gowri Betrabet-Gulwade-B.A., University of Visweswaraya, Bangalore, India; Ph.D., University of Wisconsin-Milwaukee
Assistant Professor of Design, Family and Consumer Sciences: Interior Design-2003
Wei Bian-B.Ed., M.Ed., Beijing Institute of Physical Education; M.A., University of Northern Iowa; Ph.D., University of Georgia
Instructor of Physical Education-2003
Thomas Blaine - B.A., Western Illinois University; M.A., University of Northern Iowa
Instructor of Teaching and Coordinator of Student Teaching - 1999
Sara Blanco-B.A., University of Northern lowa
Instructor of Teaching: World Language, Price Laboratory School--2003
Katherine M. Blecha - B.S., M.S., University of Nebraska-Lincoln Instructor of Teaching and Coordinator of Student Teaching - 1988
*Kenneth (Ken). M. Bleile - B.A., San Francisco State University; M.S., University of Oregon; Ph.D., University of Iowa
Professor of Speech-Language Pathology-1996 (2000)

Laquita Blockson-B.S., M.B.A., Florida A \& M University; Ph.D., University of Pittsburgh
Assistant Professor of Management, Policy and Ethics-2003
Edgar Boedeker-B.A., Wesleyan University; M.A., Ph.D., Northwestern University
Assistant Professor of Philosophy-1999
*Mary E. Boes - B.A., Briar Cliff College; M.S.W., M.P.H., Tulane University; D.S.W., University of Pennsylvania
Associate Professor of Social Work - 1994 (1999)
*Robert M. Boody - B.S., Ph.D., Brigham Young University
Associate Professor of Educational Psychology and Foundations - 1992 (1998)
*William F. Bowlin - B.A., Grove City College, Pennsylvania; M.A., University of Northern Colorado; Ph.D., University of Texas-Austin Professor of Accounting - 1994 (1998)
*Mary K. Bozik - B.S., University of Wisconsin-OshKosh; M.A., Bradley University; Ph.D., University of Illinois, UrbanaChampaign
Professor of Communication Education - 1982 (1992)
Gwen Bramlet-Hecker - B.S., Eastern Illinois University; M.S., Illinois State University
Instructor of Criminology - 1999
*Lynn A. Brant - B.S., M.S., D.Ed., Pennsylvania State University
Associate Professor of Geology - 1982 (1998)
Dorothy M. Brecheisen - B.S., Kansas State; M.S., Ph.D., Purdue University
Instructor of Biology - 1995
*Allen B. Brierly - B.A., M.A., Ph.D., Michigan State University
Associate Professor of Political Science - 1990 (1994)
Dianna L. Briggs - B.A., M.A., University of Northern Iowa
Instructor of Teaching and Coordinator of Student Teaching - 1978 (1989)

Donald B. Briggs - B.A., University of Iowa; M.A., University of Northern lowa
Instructor of Leisure Services - 1972 (1997)
\#Harry W. Brod - B.A., New York University; M.A., Ph.D., University of California-San Diego
Associate Professor of Philosophy and Humanities - 1999
Shelly Bromwich-B.A., M.A., University of Northern Iowa
Instructor of Teaching: Elementary Education-2000
*Edward J. Brown - B.S., University of Minnesota-St. Paul; M.S., Ph.D., University of Wisconsin-Madison
Director of Environmental Programs
Professor of Biology - 1992
"Kenneth H. Brown - B.S., St. Louis University; M.S., Ph.D., University of Illinois, Urbana-Champaign
Associate Professor of Economics - 1994 (2001)
"Leander A. Brown - B.A., Fisk University; M.A., Roosevelt University; Ph.D., Iowa State University
Assistant Professor of Educational Psychology and Foundations - 1970
Seth A. Brown-B.A., University of Maryland-College Park; M.A., West Virginia University; Ph.D., University of New Mexico
Assistant Professor of Psychology-2002
William J. Broz - B.A., M.A., Ph.D., University of Iowa
Assistant Professor of English - 2000
*Gregory L. Bruess - B.A., Augsburg College; M.A., Ph.D., University of Minnesota
Associate Professor of History - 1989 (1997)
Timothy J. Bryant-B.A., Washington University; M.A., M.A., University of Iowa
Assistant Professor and Reference Librarian and Bibliographer-2002

2004-2006 Faculty
*Reinhold K. Bubser - Abitur, Ziehen-Realgymnasium (Frankfurt); B.A., Western Michigan University; M.A., Ph.D., Michigan State University
Professor of German — 1982 (1984)
Associate Dean of the College of Humanities and Fine Arts - 1996
David J. Buch - B.F.A., School of the Art Institute-Chicago; B.A., Northeastern Illinois University; M.M., Ph.D., Northwestern University
Professor of Music History - 1985 (1996)
*John A. Bumpus - B.S., M.S., State University of New York-Oswego; M.A., State University of New York-Binghamton; Ph.D., St. Louis University, School of Medicine
Professor of Chemistry - 1995 (1999)
Matthew P. Bunker-B.S., Brigham Young University; M.A., Ph.D., University of Nebraska-Lincoln
Assistant Professor of Marketing-2003
Angela N. Burda-B.A., B.A.S., M.A., University of Minnesota-Duluth; Ph.D., Wichita State University
Assistant Professor of Speech-Language Pathology-2000
"Lesta A. Burgess - B.S., M.A., Northeastern State University, Oklahoma; Ed. D., Oklahoma State University
Assistant Professor of Industrial Technology - 1998
*Rebecca L. Burkhardt - B.M., Southwestern University; M.M.E., North Texas State University; Ph.D., University of Texas-Austin Professor of Theory - 1994 (2003)
Director of the Orchestra - 1988
Winston Burt-B.A., Inter-American University, Puerto Rico; M.S., Ed.S., Ph.C., Ph.D., University of Michigan
Adjunct Professor of Social Work-1988
John O. Burtis -B.A., M.A., Kansas State University; Ph.D., University of Minnesota
Professor of Communication Studies- 2000
*Adam B. Butler - B.S., University of Iowa; M.A., University of Nebraska-Omaha; Ph.D., University of Nebraska-Lincoln
Associate Professor of Psychology — 1999 (2002)
*Jeffrey J. Byrd - B.F.A., University of Alabama; M.F.A., University of Florida
Professor of Art — 1989 (2000)
*Mingshui Cai - B.A., Fujian Teaching College; M.A., Hangzhou University; M.A., University of Akron; Ph.D., Ohio State University
Professor of Curriculum and Instruction: Literacy Education - 1992 (2003)
"William P. Callahan II - B.A., University of Southern Florida; M.A.T., Rollins College; Ed.D., University of Florida
Professor of Special Education - 1979 (1989)
Associate Dean for Undergraduate Education, College of Education - 2004

Interim Head of Department of Teaching-2004
*Russell B. Camphell - Sc.B., Sc.M., Brown University; M.S., Ph.D., Stanford University
Associate Professor of Mathematics - 1983 (1988)
*Christine L. Canning - B.S., Bowling Green State University; M.A., Michigan State University; Ph.D., University of Michigan
Associate Professor of Teaching and Coordinator of Student Teaching - 1988 (1994)
*Thomas F. Capshew - B.A., Indiana University-Bloomington; J.D., Indiana University School of Law; M.S.W., Ph.D., Florida State University - Tallahassee
Assistant Professor of Social Work - 1999
*Phyllis Scott Carlin - B.S.E., Northeast Missouri State University; M.S., Ph.D., Southern Illinois University

Professor of Communication Studies - 1976 (1988)

Juan Carlos Castillo-B.A., Licendiado in Hispanic Philogy Universidad de Deusto, Bilbao, Spain; M.A., University of Iowa; Ph.D., University of Maryland
Assistant Professor of Spanish-2001
Jerry V. Caswell - B.A., Brandeis University; M.A., M.A., Ph.D., University of Wisconsin-Madison
Associate Professor and Head of the Library Information Technologies - 1999
*G. Scott Cawelti - B.A., M.A., University of Northern Iowa; Ph.D., University of Iowa
Professor of English — 1968 (1995)
C. Clifton Chancey -B.S., Miami University; M.A., Ph.D., Johns Hopkins University
Professor of Physics
Head of the Department of Physics-2001
*Paul Chao - B.S, M.S., University of Canterbury, New Zealand; M.B.A., Washington State University; Ph.D., University of Washington
Professor of Marketing — 1989 (1996)
*April D. Chatham-Carpenter - B.A., University of Central Arkansas; M.A., Ph.D., University of Oklahoma

Associate Professor of Communication Studies - 1991 (1997)
*Shing-Ling S. (Sarina) Chen-B.A., Providence College, Taichung; M.A., Ph.D., University of Iowa

Associate Professor of Communication Studies - 1990 (1998)
*Zhoujun (Joyce) Chen - B.S., Quin Hua University; M.A., Ph.D., University of Iowa
Associate Professor of Communication Studies - 1994 (2001)
*Jonathan N. Chenoweth - B.M., B.A., Oberlin College; M.M., Virginia Commonwealth University; M.M., D.M.A., State University of New York-Stony Brook
Associate Professor of Cello - 1991 (1997)
Rod M. Chesnutt-B.S., Tennessee Tech University; M.M., Arkansas State University; Ph.D., Florida State University
Assistant Professor of Marching and Symphonic Bands (Music Education)-2002
Deepak Chhabra-M.A., Schiller International University; M.Phil., Jammu University; Ph.D., North Carolina State University
Assistant Professor of Leisure, Youth and Human Services-2003
*R. Martin Chin - B.S., Lehigh University; Ph.D., University of Rochester
Assistant Professor of Chemistry - 1999
Won Cho-B.M., Manhattan School of Music; M.M., Boston University Instructor of Voice-2002
C. David Christensen - B.A., M.A., University of Northern Iowa

Associate Professor of Curriculum and Instruction: Elementary Education - 1974 (1993)
*Dennis E. Clayson - B.S., Ph.D., Brigham Young University
Professor of Marketing - 1982 (1997)
*Maureen E. Clayton - B.S., Eckerd College; Ph.D., MIT/Woods Hole Oceanographic Institute
Assistant Professor of Biology - 1998
*Scharron A. Clayton - B.S., Central State University; M.Ed., University of Delaware; Ph.D., University of Iowa
Associate Professor of Ethnic and Cultural Studies - 1991
*Roberto Clemente - B.A., M.Ed., University of Puerto Rico; Ph.D., Oregon State University
Associate Professor of Educational Leadership, Counseling and Postsecondary Education - 1998 (2003)
*William W. Clohesy - B.S., Loyola University-Chicago; M.A., Southern Illinois University-Carbondale; Ph.D., New School for Social Research, New York
Associate Professor of Philosophy - 1987 (1992)
"Carol A. Colburn - B.A., Western Washington University; M.A., Ph.D., University of Minnesota
Professor of Theatre - 1981 (1997)
"Richard W. Colburn - B.A., Western Washington University; M.F.A., University of Minnesota
Professor of Art - 1982 (1997)
*Thomas G. Connors - B.A., Washington and Lee University; M.A., Ph.D., University of Illinois, Urbana-Champaign
Associate Professor of History - 1996 (2003)
*Jennifer Cooley - B.A., Lawrence University; M.A., Syracuse University; Ph.D., University of Iowa
Assistant Professor of Spanish - 1999
"Shoshanna R. Coon - B.S., Indiana University; Ph.D., University of .Texas-Austin
Associate Professor of Chemistry - 1995 (2001)
*Timothy M. Cooney - B.S., Lockhaven University; M.S., Elmira College; Ed.D., University of Northern Colorado
Professor of Earth Science and Science Education - 1977 (1987)
"Carol A. Cooper - B.S., Oregon State University; M.S., Smith College; Ed.D., University of North Carolina-Greensboro
Associate Professor of Physical Education - 1974 (1981)
*Jeffrey S. Copeland - B.S., University of Missouri-Columbia; M.A., Arkansas State University; Ph.D., University of Missouri-Columbia
Professor of English - 1981 (1995)
Head of the Department of English Language and Literature - 1997
*Steven B. Corbin - B.A., University of Northern lowa; M.Ed., Colorado State University; Ed.D., Virginia Polytechnic Institute and State University
Associate Professor of Marketing - 1975 (1980)
Jeffrey W. Cornett-B.S.Ed., Bowling Green State University; M.S.Ed., University of Toledo; Ph.D., Ohio State University
Dean of the College of Education-2003
Professor of Education
Director of Teacher Education-2004
Vuokko E. Cornett-B.S., Bowling Green State University; M.S., University of Toledo
Adjunct Instructor of Teaching-2003
Karen Couch Breitbach - B.A., M.A., University of Northern Iowa Instructor of Teaching: Science, Price Laboratory School - 1985 (1990)
*Cynthia M. Coulter - B.S., M.L.S., Kent State University; Ph.D., University of Oklahoma
Associate Professor and Head of Acquisitions - 1989 (1992)
*Lyn L. Countryman - B.A., Iowa State University; M.A., Ph.D., University of lowa
Associate Professor of Teaching: Science, Price Laboratory School - 1990 (1997)
*Arthur T. Cox - B.B.A., M.A., Ph.D., University of Iowa
Associate Professor of Finance - 1989 (1995)
Director of the Real Estate Education Program
Patricia M. Crawford-B.S., Louisiana State University; M.Ed., Georgia State University; Ph.D., University of Virginia
Assistant Professor of Special Education-2000
*B. Keith Crew - B.A., Auburn University-Montgomery; M.A., Ph.D., University of Kentucky
Associate Professor of Sociology - 1985 (1992)
Head of the Department of Sociology, Anthropology and Criminology - 1996
*Dennis C. Cryer - B.A., M.A., University of Northern Iowa; Ph.D., University of Utah
Associate Professor of Health Education - 1976 (1989)
James D. Cryer - B.A., M.A., University of Iowa
Instructor of Teaching: Language Arts, Price Laboratory School
Instructor of Curriculum and Instruction: Literacy Education - 2000

Ivonne Cuadra-B.A., State University of New York; M.A., Ph.D., University of lowa
Assistant Professor of Spanish-2001
*Leonard M. Curtis - B.A., M.F.A., University of Iowa
Associate Professor of Theatre - 1993 (2000)
Barbara Cutter - B.A., Columbia University; Ph.D., Rutgers University
Assistant Professor of History - 2000
*Alan C. Czarnetski - B.S., M.S., Ph.D., University of WisconsinMadison
Associate Professor of Meteorology - 1992 (1998)
Dale Cyphert - B.A., San Diego State; M.B.A., University of CaliforniaDavis; Ph.D., Penn State University
Associate Professor of Management-1997 (2003)
Coordinator of Business Communication - 1997
*Dennis E. Dahms - B.J., A.M., University of Missouri; M.A., University of Colorado; Ph.D., University of Kansas
Associate Professor of Geography - 1990 (1996)
*Chandrasekhar Das - B.A., University of Calcutta, India; M.A., University of Delhi, India; M.S., Ph.D., Case Western Reserve University
Professor of Management (Operations Management) - 1986
Nadene A. Davidson - B.A., M.A., University of Northern lowa
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Interim Director of Malcolm Price Laboratory School-2001
*Roberta Davilla - B.A., Monmouth College; M.S., Boston University; Ph.D., Ohio University
Associate Professor of Communication Studies - 1994 (2000)
Graduate Program Director
*Darrel W. Davis - B.A., M.A., University of Northern Iowa; Ph.D., Oklahoma State University; CPA
Associate Professor of Accounting - 1969 (1977)
James S. Davis-B.S., Southwest Missouri State College; M.Ed., Ph.D., University of Missouri
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*Kenneth J. De Nault - B.S., Stanford University; M.S:, University of Wyoming; Ph.D., Stanford University
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*Deborah K. Deemer - B.A., Muskingum College; M.S., Pennsylvania State University; Ph.D., University of Minnesota
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Dawn I. Del Carlo-B.A., Augustana College; M.S., Ph.D.,Purdue University
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Lieutenant Colonel and Head of the Department of Military Science - 1999
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Director, Regents Center for Early Developmental Education - 1993
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Assistant Professor of Art - 1999
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Professor of Social Work-1992
Mary S. Doyle - B.A., M.A., University of Northern Iowa
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Assistant Professor of Anthropology - 2000
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*J. Philip East - B.S., Southwestern Oklahoma State University; M.S., Ph.D., University of Oregon
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Professor of Art - 1969 (1985)
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Professor of Performance Studies - 1971 (1989)
Trudy Eden - B.A., University of Texas-Austin; J.D., Emory University; Ph.D., John Hopkins University
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Professor of Leisure Services
Director of the School of Health, Physical Education and Leisure Services - 1991
Rehecca K. Edmiaston-B.S., M.Ed., Central State University; Ph.D., University of Texas
Associate Professor of Curriculum and Instruction: Literacy Education/ Early Childhood Education-1994 (2003)
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Director, Institute for Educational Leadership - 1988 (1990)
Dianna Engelbrecht-B.S., Iowa State University; M.A., University of Iowa; Ed.D., University of Northern Iowa
Clinical Instructor of Educational Leadership, Counseling, and Postsecondary Education-2000
Lynne C. Ensworth - B.S., Gordon College; M.A., University of Southern Maine
Instructor of Curriculum and Instruction: Elementary Education - 1996

Connie J. Erpelding-B.A., M.A.E., Ed.D., University of Northern Iowa
Assistant Professor of Curriculum and Instruction: Elementary Education-2000
*Lawrence T. Escalada - B.S., B.S., M.S., Ph.D., Kansas State University
Associate Professor of Physics and Science Education - 1997 (2003)
*Susan L. Etscheidt - B.A., M.A.E, University of Northern Iowa; Ph.D., University of Minnesota
Associate Professor of Special Education - 1977 (1990)
Todd A. Evans-B.S., Slippery Rock University; M.A., Indiana State . University; Ph.D., The Pennsylvania State University
Assistant Professor of Athletic Training-2002
Bettina G. Fabos-B.A., Oberline College; M.A., University of Michigan; Ph.D., University of Iowa
Assistant Professor of Electronic Media-2001
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Professor of Industrial Technology - 1983 (1990)
Head of the Department of Industrial Technology - 1990
Michael P. Fanelli - B.M., University of Illinois; M.A., University of Missouri; Ed.D., University of Illinois
Assistant Professor of Educational Psychology and Foundations - 1987 (2001)
"Philip M. Fass - B.F.A., University of Wisconsin-Milwaukee; M.F.A., University of Illinois, Urbana-Champaign
Associate Professor of Art - 1991 (1996)
Richard A. Featherstone-B.A., Oregon State University; M.A., Western Seminary; M.S., Ph.D., Purdue University Assistant Professor of Criminology-2002
*John T. Fecik - B.S., California State University, Pennsylvania; M.Ed., Ed.D., University of Maryland
Professor of Industrial Technology - 1981 (1985)
*Richard H. Fehlman - B.A., Illinois Benedictine College; M.A., Ph.D., University of lowa
Associate Professor of Teaching - 1991 (1997)
Coordinator of Student Teaching-2001
*Louis E. Fenech - B.A., M.A., Ph.D., University of Toronto
Associate Professor of History - 1995 (2001)
*Mark A. Fienup - B.A., University of Northern Iowa; M.S., Ph.D., Iowa State University
Associate Professor of Computer Science - 1985 (1996)
*Judith M. Finkelstein - B.S., University of Illinois; M.A., University of Northern Iowa; Ph.D., University of Minnesota
Professor of Curriculum and Instruction: Early Childhood Education - 1968 (1989)
*Kevin J. Finn - B.A., University of Northern Iowa; M.S., Ph.D., University of New Mexico
Assistant Professor of Physical Education - 1999
"Linda M. Fitzgerald - B.A., M.A., Ph.D., University of Chicago
Associate Professor of Curriculum and Instruction: Early Childhood Education - 1994 (2000)
*W. Michael Fleming - B.A., University of Wisconsin-Madison; M.A., University of Connecticut; Ph.D., University of Wisconsin-Madison Assistant Professor of Design, Family and Consumer Sciences: Family Services - 1999
*Angeleita S. Floyd - B.M., Stetson University; M.M., M.M.E., D.M., Florida State University
Professor of Flute - 1986 (1997)
*Thomas M. Fogarty - A.B., Catholic University of America; M.A., Georgetown University; A.M., Ph.D., University of Pennsylvania
Professor of Geography and Public Policy - 1989 (2001)
Richard A. Followill - B.S., M.B.A., Ph.D., University of Alabama
Professor of Finance
Head of the Department of Finance - 1999
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Associate Professor of Educational Psychology \& Foundations - 1975 (1981)
*Suzanne R. Freedman - B.A., University of Delaware; M.A., Ph.D., University of Wisconsin-Madison
Associate Professor of Educational Psychology and Foundations - 1994 (2000)
*John Fritch-B.A., University of Nebraska-Lincoln; M.A., Ph.D., University of Kansas
Associate Professor of Communication Studies
Head of the Department of Communication Studies-2002
."Taggart F. Frost - B.S., M.S., Ph.D., Brigham Young University
Associate Professor of Management (Organizational Behavior) - 1978 (1984)

Jennifer L. Fuhrman-B.A., M.A., Miami University-Ohio
Instructor of Economics- 2000
*James F. Fryman - B.A., Denison University; M.A., Miami University, Ohio; Ph.D., University of North Carolina-Chapel Hill
Associate Professor of Geography - 1978 (1990)
*Jeffrey L. Funderburk - B.M., University of Southern Mississippi; M.M., D.M.A., University of Illinois

Professor of Tuba/Euphonium — 1987 (1997)
*Sherry K. Gable - B.A., University of Northern Iowa; M.A., Ph.D., University of Iowa
Assistant Professor of Educational Psychology and Foundations - 1974 (1980)
*Anthony J. Gabriele - B.A., Clark University, Massachusetts; M.A., Ph.D., University of Pittsburgh
Associate Professor of Educational Psychology and Foundations - 1997 (2003)
*Stephen J. Gaies - B.A., Hamilton College; M.A., Ph.D., Indiana University
Professor of English —. 1978 (1986)
Joseph J. Gale -B.S., M.S., Iowa State University
Instructor of Earth Science-2001
*Deborah G. Gallagher - B.A., Virginia Polytechnic Institute; M.E.D., Lynchburg College; Ph.D., University of Virginia
Professor of Special Education - 1991 (2002)
*Michael M. Gasser - B.A., University of South Florida; M.A., Ph.D., University of Minnesota
Associate Professor of Psychology - 1994 (2000)
Julianne Gassman - B.A., M.A., University of Northern Iowa
Instructor of Leisure, Youth and Human Services - 1998
*Patricia L. Geadelmann - B.A., University of Northern Iowa; M.A., University of Iowa; M. Div., United Theological Seminary of the Twin Cities; Ed.D., University of North Carolina-Greensboro
Professor of Physical Education - 1972 (1984)
Special Assistant to the President for Board and Governmental Relations - 1996
-Jean M. Gerrath - B.Sc., University of British Columbia; Ph.D., University of Guelph
Associate Professor of Biology - 1994 (1999)
Scott R. Giese-A.A., Frie Community College, Buffalo, New York; B.S., M.S., Ph.D., University of Alabama-Tuscaloosa

Assistant Professor of Industrial Technology-2003
*Andrew R. Gilpin - B.S., M.A., Ph.D., Miçhigan State University
Professor of Psychology — 1974 (1986)
Samuel Lyndon Gladden - B.A., University of Texas; M.A., Ph.D., Texas A\&M University
Assistant Professor of English - 2000
*Richard P. Glockner - B.A., New York University; M.F.A., Temple University
Associate Professor of Theatre - 1991
"Cynthia A. Goatley - B.A., M.A., University of Arkansas; Ph.D., Bowling Green State University
Associate Professor of Theatre - 1991 (1994)
Director of Graduate Women's Studies Program (2001)
"Joanne A. Goldman - B.A., M.A., Ph.D., State University of New York-Stony Brook
Associate Professor of History - 1990 (1998)
Artur Z. Golczewski-B.A., University of Dallas; M.A., Virginia Commonwealth University; Ph.D., University of Iowa
Assistant Professor of Art-2003
Melvin Gonnerman-B.A., University of Northern Iowa; M.A., Ph.D., Northern Illinois University
Assistant Professor of Psychology-1999 (2002)
Nicole A. Goreham-B.A., M.A., University of Northern Iowa
Instructor of Physical Education-2003
*Ronald J. (Joe) Gorton - B.S., University of Houston-Clear Lake City; M.S.W., University of Houston; Ph.D., Texas A\&M University

Associate Professor of Criminology - 1998 (2003)
*Vince F. Gotera - B.A., Stanford University; M.A., San Francisco State University; M.F.A., Ph.D., Indiana University
Associate Professor of English - 1995 (1997)
Editor, North American Review - 2000
*Peter G. Goulet - B.A., Denison University; M.B.A., Ph.D., Ohio State University
Professor of Management (Business Policy and Strategy)— 1974 (1987)
Chair of Entrepreneurial Studies - 1997
*Randy E. Grahowski - B.M.E., Indiana University; M.M., University of Nevada-Reno; D.M., Indiana University
Professor of Trumpet - 1986 (1996)
*Paul A. Gray - B.S., University of Iowa; Ph.D., Michigan State University
Assistant Professor of Computer Science - 1999
Tammy S. Gregersen-B.A., Bethel College; M.A., University of Las Condes, Chile; Ph.D., Catholic University of Valparaiso
Assistant Professor of English-2003
*Mark A. Grey - B.A., University of Northern Colorado; M.A., Eastern New Mexico University; Ph.D., University of Colorado-Boulder
Professor of Anthropology - 1990 (2001)
John R. Groves-B.S., M.S., University of Oklahoma; Ph.D., University of Iowa
Assistant Professor of Geology-2000
Mary F. Guenther - B.A., M.A., University of Northern Iowa
Instructor of Teaching: Elementary Education - 1992
Gary G. Gute-B.A., M.A., University of Northern Iowa; Ph.D., Iowa State University
Assistant Professor of Design, Family and Consumer Sciences: Family Services-1999 (2003)
*Robin D. Guy - B.M.E., Baldwin-Wallace College Conservatory of Music; M.M., Baylor University; D.M.A., University of Arizona
Professor of Collaborative Piano - 1990 (2001)
*Joel K. Haack - B.A., M.S., M.S., Ph.D., University of Iowa
Professor of Mathematics - 1991
*Carlin F. Hageman - B.A., M.A., Ph.D., University of Colorado
Professor of Speech-Language Pathology - 1982 (1999)
*David R. Hakes - B.S., Ph.D., Iowa State University
Professor of Economics - 1992 (1997)
"Frederick W. Halgedahl - B.M., Eastman School of Music; M.M., Emporia State University
Assistant Professor of Violin - 1986
Harry (Tom) T. Hall-B.A., M.A., University of Arkansas
Assistant Professor of Communication Studies-2003
James G. Hall - B.S., M.S., Eastern Illinois University Instructor of Physical Education - 1983

Michael G. Hall-B.A., M.PIA., University of Pittsburgh; Ph.D., University of California-Santa Barbara
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Michael Hamilton-B.A., University of Northern Iowa
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*Nancy P. Hamilton - B.A., San Jose State University; M.A., California State University-Los Angeles; Ph.D., University of Illinois
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Karrie L. Hamstra - B.S., Olivet Nazarene University; M.S., University of Illinois-Chicago; Ph.D., Temple University
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*Curtiss D. Hanson - B.S., University of Nebraska-Omaha; Ph.D., Texas A\&M University
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*Richard Allen Hays, Jr. - B.A., Johns Hopkins University; M.A., Ph.D., University of North Carolina
Professor of Political Science - 1979 (1994)
Director of Graduate Program in Public Policy - 1994
Deirdre Heistad -B.A., M.A., University of lowa; Ph.D., University of Illinois, Urbana-Champaign
Assistant Professor of French-2000
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Director of Undergraduate Women's Studies Program-2001
Vanmala Hiranandani-B.C., University of Bombay, India; M.S.W., M.Phil., Tata Institute of Social Sciences, Bombay, India; Ph.D., University of Pennsylvania
Assistant Professor of Social Work-2002
Robert T. Hitlan-B.A., University of Toledo; M.S., Illinois State University; Ph.D., University of Texas-El Paso
Assistant Professor of Psychology-2002
*Thomas A. Hockey - B.S., Massachusetts Institute of Technology; M.A, M.S., Ph.D., New Mexico State University

Professor of Astronomy - 1988 (1999)
Lowell R. Hoeft - B.S., University of Wisconsin-Stevens Point; M.A., University of Northern Iowa
Instructor of Teaching: Foreign Language - 1987
Coordinator of Student Teaching-2003
Betsy Hoffman-B.A., M.B.A., University of Northern Iowa
Instructor of Management Information Systems-2003
Donna R. Hoffman-B.A., Phillips University; Ph.D., University of Oklahoma
Assistant Professor of Political Science-2001
Sheryl J. Hoffman-B.A., M.A., University of Northern Iowa
Instructor of Teaching: Elementary Education -1994 (2000)
Randy A. Hogancamp - B.A., University of Northern Iowa; M.M., Northwestern University
Assistant Professor of Percussion - 1972 (1976)
*Charles W. Holcombe - B.A., M.A., Ph.D., University of Michigan Professor of History - 1989 (2001)
*Margaret G. Holland - B.A., M.A., Boston College; Ph.D., State University of New York-Buffalo
Associate Professor of Philosophy - 1991 (1998)
*Gloria Kirkland Holmes - B.A., Fisk University; M.S., Ph.D., Indiana State University
Associate Professor of Curriculum and Instruction: Early Childhood Education - 1978 (1983)
Sunggye Hong-B.A., Taegu University; M.A., Ph.D., University of Arizona
Assistant Professor of Special Education-2003
Paul Horton - B.S., M.A., University of Texas-Austin
Instructor of Teaching: Social Studies - 1999
Wendy J. Hoskins-B.A., William Penn University; M.A., Truman State University; Ph.D., Idaho State University
Assistant Professor of Education-2003
Douglas R. Hetek-B.S., Northern Arizona University; M.A, San Diego State University; D.I.T., University of Northern Iowa
Assistant Professor of Industrial Technology-2000 (2001)
"Susan D. Hudson - B.A., University of California-Davis; M.S., California State University-Los Angeles; Ph.D., University of Utah
McElroy Professor of Youth Leadership Studies, Leisure, Youth and Human Services - 1994
Janet R. Hurley-B.A., University of Arkansas; M.A., M.S., Ph.D., - Southern Illinois University

Assistant Professor of Health Promotion and Education-2000
Julie E. Hushand - B.A., Bucknell University; M.A., University of Chicago; Ph.D., State University of New York-Buffalo
Assistant Professor of English - 2000
*Mohammed Z. Iqbal - B.S., M.S., Dhaka University, Bangladesh; M.S,, University of Akron; Ph.D., Indiana University
Associate Professor of Geology - 1994 (2000)
*Hans R. Isakson - B.S., Ph.D., University of Wisconsin-Milwaukee
Professor of Economics - 1990 (2000)
Karthik N.S. Iyer-B.E., Bangalore University, India; M.B.A, Banaras Hindu University, India; Ph.D., Oklahoma State University
Assistant Professor of Marketing-2003
"Laura L. Jackson - B.A., Grinnell College; Ph.D., Cornell University
Associate Professor of Biology - 1993 (1999)
Mark A. Jacobson - B.A., B.A., University of Northern Iowa Instructor of Computer Science - 1999
*Michael D. Janopoulos - B.S., M.A., Northwestern University; M.A., University of Northern Iowa; Ph.D., Ohio State University
Associate Professor of English - 1989 (1995)
"Allen D. Jedlicka - B.A., San Diego State University; Ph.D., Northwestern University
Professor of Management (Organizational Behavior) - 1973 (1982)
Lisa K. Jepsen-B.A., Grinnell College; M.A., University of Missouri, Kansas City; Ph.D., Vanderbilt University
Assistant Professor of Economics-2000
*M. Lathon Jernigan - B.M., M.M., Southern Methodist University; D.M.A., University of Texas-Austin

Professor of Theory - 1971 (2001)
Xiaoquan (John) Jiang -B.S., University of Electronic Science and Technology of China; M.A., Sichuan University; M.A., Northern State University; M.A., Texas A \& M University; Ph.D., University of Houston
Assistant Professor of Finance-2003
*Charles D. Johnson - B.S., Florida State University; M.I.E., Western Carolina University; Ed.D., North Carolina State University
Professor of Industrial Technology - 1981 (1993)
*John W. Johnson - B.A., St. Olaf College; M.A., Ph.D., University of Minnesota
Professor of History-1988
*Mary Frisbee Johnson - B.A., Montana State University; M.F.A., University of Cincinnati
Professor of Art-1999
*Ronald W. Johnson - B.M.E., Texas Technical University; M.A., California State University-Northridge; Ed.D., University of Illinois
Professor of Conducting - 1982 (1996)
Steven J. Johnson-B.A., Union College, Nebraska; M.S., University of Nebraska-Lincoln; Ph.D., University of Utah
Assistant Professor of Finance-2003
*Leslie S. Jones - A.B., Mount Holyoke College; M.S., University of New Hampshire; M.A., Ph.D., The Ohio State University
Assistant Professor of Biology - 1997
*Elana Joram - B.A., M.A., Ph.D., University of Toronto
Associate Professor of Educational Psychology and Foundations - 1995 (1998)
*Sue A. Joslyn - B.A., M.A., University of Northern Iowa; Ph.D., University of lowa
Professor of Health Promotion and Education - 1990 (2001)
*James E. Jurgensen - B.S., University of Minnesota; M.S., Ph.D., University of Arizona
Professor of Biology - 1992 (2002)
Bryce E. Kanago-B.A.E., Wayne State College; Ph.D., University of Iowa
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Associate Professor of Management (Management Information Systems) - 1992 (1998)

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Associate Professor of Management (Management Information Systems) - 1994 (2003)
*Ali E. Kashef - B.S., Lincoln University, Jefferson City; M.S., Central Missouri State University; Ph.D., Southern Illinois University
Professor of Industrial Technology - 1992 (2001)
*Thomas W. Keefe, III - B.A., University of Colorado; M.S.W., University of Denver; D.S.W., University of Utah
Professor of Social Work - 1973 (1982)
Director of the Master of Social Work Program-2002
Head of the Department of Social Work - 1990
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Professor of Teaching
Coordinator of Student Teaching - 1969 (1990)
*Kathleen A. Kerr - B.A., M.A., Stanford University; Ph.D., Texas Women's University
Professor of Physical Education - 1989 (1997)
Thomas L. Kessler - B.G.S., M.A., M.B.A., University of Iowa
Associate Professor and Bibliographer - 1983 (1993)
Dennis W. Kettner - B.A., M.A., University of Northern Iowa
Instructor of Teaching: Mathematics - 1975
Sara L. Kimble-B.A., University of California-Santa Cruz; M.A., Ph.D., University of Iowa
Assistant Professor of History-2002
"Syed N.U.A. Kirmani - B.S., M.S., Lucknow University, India; Ph.D., Aligarh Muslim University, India
Professor of Mathematics - 1984 (1991)
*Michael L. Klassen - B.A., Tabor College, M.A.T., Mennonite Seminary; M.S., Ph.D., Kansas State University
Associate Professor of Marketing - 1987 (1992)
*Christopher L. Kliewer - B.A, Iowa State University; M.S., Ph.D., Syracuse University
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*Jerome F. Klinkowitz - B.A., M.A., Marquette University; Ph.D., University of Wisconsin
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Kimberly Knesting—B.A., Carthage College; Ph.D., Indiana University Assistant Professor of Educational Psychology and Foundations-2003
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*Susan J. Koch - B.S., Dakota State College, M.A., Ed.D., University of Northern Iowa
Professor of Health Promotion and Education - 1983 (2000)
Associate Provost and Associate Vice President for Academic Affairs - 2001

Alexandra Kogl-B.A., University of California-Santa Cruz; M.A., Ph.D., University of Maryland
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*Frank W. Kohler - B.A., St. Cloud State University; M.A., Ph.D., University of Kansas
Associate Professor of Special Education - 1999 (2001)
*Jurgen Koppensteiner - Ph.D., University of Graz, Austria
Professor of German — 1968 (1976)
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Professor of Psychology - 1990 (2001)
Special Assistant for Academic Affairs-2001
*Kyle L. Kostelecky - B.A., Washington State University; M.S., Ph.D., Iowa State University
Assistant Professor of Design, Family and Consumer Sciences: Family Services - 1999
Christopher L. Kowalski-B.A., Creighton University; M.A., University of Idaho
Instructor of Leisure, Youth and Human Services-2000
"Dean A. Kruckeberg - B.A., Wartburg College; M.A., Northern Illinois University-DeKalb; Ph.D., University of Iowa
Professor of Public Relations - 1983 (1994)
Karla K. Krueger - B.A., Luther College; M.A., University of Northern Iowa
Instructor of Teaching and Curriculum and Technology Project Specialist - 1996 (1997)
*Robert R. Krueger - B.A., Ph.D., University of Minnesota
Associate Professor of Spanish and Portuguese - 1984 (1991)
*Roger A. Kueter - B.A., Loras College; M.A., Ed.D., Indiana University
Professor of Education: Curriculum \& Instruction - 1970 (1988)
Director of the Office of Clinical Field Experience and Community College Relations-2004
Anne V. Lair-B.A., University of Wisconsin; M.A., Ph.D., Ohio State University
Assistant Professor of French-2003
Nicole C. Lamartine-B.M., New Mexico State University; M.M., D.M.A., University of Arizona

Assistant Professor of Choral Music-2003
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Associate Professor of Curriculum and Instruction: Literacy Education - 1995 (2001)
"Eric R. Lange - B.A., Trinity University; M.F.A., Temple University Associate Professor of Theatre and Technical Director - 1995 (2001) Acting Head of Department of Theatre-2003
Jill Lankford-B.A., California State University-Chico; B.L.A., M.U.R.P., M.L.A., University of Oregon

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Professor of Mathematics - 1986 (1996)
Robert E. Leo - B.A., M.A., University of Northern Iowa
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*Jay T. Lees - B.A., Gettysburg College; M.A., Ph.D., Tulane University Associate Professor of History - 1987 (1993)
"Michael J. Leiber - B.A., Marquette University; M.A., Ph.D., State University of New York-Albany
Professor of Sociology - 1988 (2002)
Judy Lemke - B.A., Iowa State University
Instructor of Teaching: Family and Consumer Science, Price Laboratory School-2001
*Yury S. Lerner - B.S., M.S., State Polytechnic University-Odessa, Russia; Ph.D., Ukranian Academy of Sciences-Kiev, Russia
Professor of Industrial Technology - 1995
Lucille J. Lettow - B.A., University of Northern Iowa; M.A., University of Missouri-Columbia; M.A., University of Northern lowa
Professor and Youth Collection Librarian - 1980 (1997)
"Larry P. Leutzinger - B.A., M.A., University of Northern lowa; Ph.D., University of lowa
Associate Professor of Mathematics - 1988 (2000)
Jian (Lee) Li-B.A., Southwest China Normal University; M..A., Lock Haven University of Pennsylvania; M.A., Ph.D., University of Kansas
Assistant Professor of Anthropology-2001 (2003)
Michael J. Licari-B.A., University of Minnesota; M.A., Ph.D., University of Wisconsin-Milwaukee
Associate Professor of Political Science-2001 (2003)
"Timothy Lindquist - B.S., Northern Michigan University; M.B.A., Michigan State University; Ph.D., University of Colorado-Boulder Associate Professor of Accounting - 1991 (1997)
*Steven E. Lobell - B.A., University of Wisconsin-Madison; M.A., New York University; Ph.D., University of California-Los Angeles
Associate Professor of Political Science - 1997 (2002)
Amy Lockhart-B.A., Wartburg College; M.A., University of Northern Iowa
Instructor of Teaching: Elementary Education, Price Laboratory School-2000
*Mary Losch - B.S., Murray State University; M.A., Ph.D., University of lowa
Associate Professor of Psychology - 1998
Joan K. Loslo - B.A., Wartburg College; M.A., University of Iowa; M.A., University of Northern Iowa

Assistant Professor and Cataloging Librarian and Bibliographer - 1987 (1993)

Keith J. Lostroh-B.A., University of Nebraska-Lincoln
Major and Assistant Professor of Military Science-2000
*Barbara S. Lounsberry - B.A., M.A., University of Northern Iowa; Ph.D., University of Iowa

Professor of English - 1976 (1990)
*Julie C. Lowell - B.A., Ohio Wesleyan University; M.Ed., Boston University; M.A., Ph.D., University of Arizona
Associate Professor of Anthropology - 1987 (1995)
*James F. Lubker - B.S., Mankato State College; M.A., Ph.D., University of lowa
Professor of Communicative Disorders
Dean of the College of Humanities and Fine Arts - 1995
Robin J. Lund-B.A., Whitworth College; M.S., Eastern Washington University; Ph.D., University of Idaho
Assistant Professor of Physical Education-2002
Rebecca A. Lutkenhaus-B.A., University of Northern Iowa; J.D., M.L.S., University of Iowa

Assistant Professor and Documents and Maps, Reference Librarian and Bibliographer-2001
*Gene M. Lutz -B.S., M.S., Ph.D., Iowa State University
Professor of Sociology — 1973 (1986)
Director of Center for Social and Behavioral Research
Stanley P. Lyle - B.A., University of Northern Iowa; M.A., University of Iowa; M.B.A., University of Northern Iowa
Associate Professor and and Reference Librarian and Bibliographer — 1977 (1988)
*Annette F. Lynch - B.A., M.A., University of Iowa; Ph.D., University of Minnesota
Associate Professor of Design, Family and Consumer Sciences: Textiles and Apparel - 1991 (1999)
"Catherine A.F. MacGillivray - A.B., Barnard College; M.A., University de Paris VIII; Ph.D., University of California-Berkeley
Associate Professor of English - 1996 (1999)
*Kristin Mack - B.A., Marquette University; M.A., Ph.D., Iowa State University
Assistant Professor of Sociology — 1996 (1998)
*Mickey G. Mack - B.A., M.A., University of Northern lowa; Ph.D., University of lowa
Associate Professor of Physical Education-1995 (2002)
M. Kimberly MacLin-B.A., University of California-Riverside; Ph.D., University of Nevada-Reno
Assistant Professor of Psychology-2001
Otto H. MacLin-B.A., M.A., University of Central Oklahoma; Ph.D., University of Nevada-Reno
Assistant Professor of Psychology-2001
*Dauglas Magnuson - B.A., Bethel College; M.A., University of Minnesota; Ph.D., University of Minnesota
Assistant Professor of Leisure, Youth and Human Services - 1998
Director of Institute for Youth Leaders-2003
"Donna J. Maier - B.A., College of Wooster; M.A., Ph.D., Northwestern University
Professor of History - 1978 (1986)
James A. Maltas - B.A., M.A., University of Northern Iowa
Instructor of Teaching: Mathematics - 1991
*Kirk P. Manfredi - B.S., Rocky Mountain College; Ph.D., Montana State University
Associate Profepssor of Chemistry - 1991 (1997)
Joseph J. Marchesani - B.A., Fordham University; M.S., Brooklyn College; M.Ed., Temple University
Assistant Professor of Curriculum and Instruction: Educational Technology
Coordinator of Audio and Video Production for the Center for Educational Technology - 1972 (1977)
Barbara J. Mardis - B.A., Shimer College; M.B.A., University of Northern Iowa
Instructor of Economics - 1981
*Jerilyn A. Marshall - B.A., Purdue University; M.L.S., Vanderbilt University; M.A., Northwestern University
Assistant Professor and Head of Reference and Instructional Services - 1998
*Ripley E. Marston - B.S., James Madison University; M.S., University of Tennessee-Knoxville; Ph.D., University of Iowa
Professor of Physical Education - 1976 (2003)
"Christopher Martin - B.A., Capitol University; M.A., Emerson College; Ph.D., University of Michigan
Associate Professor of Electronic Media - 1995 (2000)
*Katherine F. Martin - A.B., Douglas College, Rutgers; M.S.L.S., M.A., University of North Carolina-Chapel Hill
Associate Professor of Library Science - 1993
Head of Collection Management and Special Services - 1982 (1988)
*Robert F. Martin - B.A., Wofford College, South Carolina; M.A., Ph.D., University of North Carolina-Chapel Hill
Professor of History - 1981 (1990)
Head of the Department of History-2003
Lori M. Mason - B.S., M.S., Ferris State University; Ph.D., University of Oklahoma; CPA
Assistant Professor of Accounting - 2000 (2001)
James E. Mattingly - B.S.B.A., Avila College; M.B.A., Southwest Missouri State University, Ph.D., University of Missouri
Assistant Professor of Business Policy and Strategy-2003
*Philip Mauceri - B.A., M.A., New York University; Ph.D., Columbia University
Associate Professor of Political Science - 1994 (1998)
*Charles R. May - B.S., West Texas State University; M.A., Eastern New Mexico University; Ph.D., Ohio State University; Ed.D., Vanderbilt University
Professor of Curriculum and Instruction: Early Childhood - 1982
*David W. May - B.G.S., University of Kansas; M.A., University of California-Davis; Ph.D., University of Wisconsin-Madison
Professor of Geography - 1985 (2002)
*Tony N. McAdams - B.A., University of Northern Iowa; J.D., University of Iowa; M.B.A., Columbia University
Professor of Law and Management - 1982
Acting Head of the Department of Management-2003
Janet E. McClain - B.S., Northern Illinois University; M.S.Ed., University of Dayton
Instructor of Curriculum and Instruction: Elementary Education
Director of Minorities in Teaching Program - 1976
John W. McCormick - B.S., The Pennsylvania State University; Ph.D., University of California-Los Angeles
Professor of Computer Science- 1996
*Kenneth J. McCormick - B.A., University of California-Riverside; Ph.D., Iowa State University
Professor of Economics - 1982 (1991)
*James G. McCullagh - B.A., California State College-Chico; M.S.S.W., University of Missouri-Columbia; Ed.D., Northern Illinois University-DeKalb; J.D., University of Iowa
Professor of Social Work - 1981 (1989)
Shelley McCumber-B.A., University of Northern Iowa
Instructor of Teaching: Physical Education, Price Laboratory School2003
Mary H. McDade - B.S., University of West Florida; M.S., Oregon State University
Instructor of Biology - 1995
*Jean M. McDonald - B.M., Simpson College; M.A., D.M.A., University of Iowa
Associate Professor of Voice - 1988 (1996)

Terri L. McDonald - B.S., M.A., Murray State; M.A., Ed.D., University of Northern Iowa
Assistant Professor of Teaching: Electronic Media - 1990 (1998)
*Jacqueline McGlade-B.A., M.A., University of Nebraska; Ph.D., The George Washington University
Associate Professor of History
Associate Dean for Graduate Academic Affairs, Graduate College-2003
Shannon McGuire-B.A., University of Minnesota
Instructor of Teaching: Music, Price Laboratory School-2003
Jon McKowen-B.S., Upper Iowa University
Instructor of Teaching: Physical Education, Price Laboratory School2003
*Ardith J. Meier - B.A., Wartburg College; M.A., University of Iowa; Ph.D., University of Vienna, Austria
Associate Professor of English - 1992 (1999)
Pamela Meier-B.A., University of Iowa
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*Marilyn Mercado - B.A., Point Park College; M.L.S., University of Pittsburgh; M.A., University of Northern Iowa
Associate Professor of Library Science - 1989 (1995)
Dean of Library Services - 2002
*David R. Mercer - B.A., Clarion State College; M.S., University of Michigan; Ph.D., University of California-Berkeley
Assistant Professor of Biology - 1999
Kurtis S. Meredith - B.A., University of Southern Maine; M.Ed., Ed.S., James Madison University; Ph.D., University of Iowa
Associate Professor of Curriculum and Instruction: Literacy Education - 1994 (2001)

Co-director of Office of Education for Democracy
Christopher Merz-B.M., University of Iowa; M.M., University of Massachusetts
Assistant Professor of Jazz-2000
*Joyce B. Milambiling - B.L.S., Boston University; M.A., University of California-Berkeley; Ph.D., City University of New York
Associate Professor of English - 1997 (2003)
${ }^{*}$ Catherine M. Miller - B.A., M.A., California State-Long Beach; Ph.D., University of Arizona
Associate Professor of Mathematics - 1997 (2003)
*Kim Miller - B.A., Wartburg College; M.S., Northwest Missouri State University
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Frances D. Miller - B.A., University of Nebraska-Kearney; M.A., University of Michigan
Instructor of Teaching
Coordinator of Student Teaching - 1998
Linda K. Miller-L.P.N., Hawkeye Community College; B.A., M.A., University of Northern Iowa
Instructor of Health Education-2003
Geofrey T. Mills-B.S., M.S., Ph.D., University of Illinois
Professor of Finance-1983 (2001)
Jennifer Mishra-B.M., University of Northern Colorado; M.M., Ph.D., Kent State University
Assistant Professor of Graduate Music Education
Associate Director of Music- 2000
*Karen S. Mitchell - B.S., M.S., Southern Illinois University; Ph.D., Louisiana State University
Associate Professor of Performance Studies - 1991 (1996)
Atul Mitra-B.Tech., Malavigy Regional Engineering College; M.Tech., Indian Institute of Technology, New Delhi; Ph.D., University of Arkansas
Associate Professor of Human Resource Management-2000
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Professor of Educational Psychology and Foundations - 1990 (2000)
*Janey L. Montgomery - A.B., M.S., Fort Hays State University; Ph.D., Iowa State University
Associate Professor of Teaching - 1990 (1995)
Coordinator of Student Teaching - 1990
Susan M. Moore - B.A., University of Northern Iowa; M.A., University of Iowa; M.A., University of Arizona
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*Siobahn M. Morgan - B.S., University of Minnesota; M.S., Ph.D., University of Washington
Professor of Astronomy - 1991 (2003)
Jayne Morgan Witte-B.A., North Dakota State University; M.A., University of Wisconsin-Madison; Ph.D., University of Nebraska
Assistant Professor of Communication Studies-1998
*Farzad Moussavi - B.A., Institute of Advanced Accounting, Iran; D.A.S., Leeds Polytechnic, England; M.B.A., Roosevelt University; Ph.D., University of Arkansas
Professor of Management (Organizational Behavior and Strategic Management) - 1985 (1997)
Dean of the College of Business Administration - 2003
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Associate Professor of Mathematics - 1993 (2001)
Stephen L. Muzzatti-B.A., M.A., Ph.D., York University, Toronto, Canada
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*Anne G. Myles - A.B., Bryn Mawr College; M.A., Ph.D., University of Chicago
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*Glenn T. Nelson - B.Ed., Keene State College; M.S.T., University of New Hampshire; Ph.D., University of Iowa
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Scott Nice-B.A., Western Michigan University-Kalamazoo; M.F.A., Northern Illinois University
Assistant Professor of Theatre-2002
Lee H. Nicholas - B.S.B.A., University of Kansas; M.B.A., University of Tulsa; CPA, CMA
Assistant Professor of Accounting - 1974
Curtis P. Nielsen - B.A., B.A., M.A.E., University of Northern Iowa
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Julio Noboa - B.A., University of Illinois-Chicago; M.A., Northwestern University
Instructor of Teaching and Coordinator of Student Teaching - 1996
Heidi Noonan-Day-B.A., J.D., University of Iowa
Instructor of Law-2000
Kathy R. Oakland - B.A., M.A., University of Northern Iowa
Instructor of Teaching - 1987
Pre-Student Teaching Field Experience Coordinator
Tyler G. O'Brien-B.A., State University of New York-Plattsburgh; M.A., University of Tennessee-Knoxville; Ph.D., Binghamton University, State University of New York
Assistant Professor of Anthropology-2002
Penny J. O'Connor - B.A., M.A., University of Northern Iowa
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*Timothy E. O'Connor - B.A., M.A., Creighton University; Ph.D., University of Minnesota
Professor of History - 1982 (1992)
Assistant Vice President of Academic Affairs for International Programs - 1995
*Christian W. Ogbondah - B.A., University of Nigeria; M.A., University of Nebraska; Ph.D., Southern Illinois University
Professor of Journalism - 1989 (1998)
*Kevin C. O'Kane - B.S., Boston College; Ph.D., Pennsylvania State University
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*Stephen L. O'Kane - B.S., M.S., Colorado State University; Ph.D., Washington University-St. Louis
Associate Professor of Biology - 1996 (2000)
James B. O'Loughlin-B.A., Trinity College; M.A., Boston College; Ph.D., State University of New York-Buffalo
Assistant Professor of English-2003
Ronald E. O'Meara-B.T., M.A., D.I.T., University of Northern Iowa
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Wendy M. Olson-B.A., Mt. Holyoke College; Ph.D., University of California-Berkeley
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Assistant Professor of Geography-2000
Michelle L. Ozman-B.A., Angelo State University; M.F.A., Texas Woman's University
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Nicholas Pace-B.A., University of Northern Iowa; M.S., Drake University
Instructor of Teaching and Coordinator of Student Teaching-2000
*Catherine Palczewski - B.S., M.A., Ph.D., Northwestern University
Professor of Communication Studies - 1994 (2003)
Andrew Parkes-B.A., M.S., Iowa State University; Ph.D., Oklahoma State University
Instructor of Economics-2002 (2003)
Andrea Pascarella-B.S., St. John Fisher College; M.S., Ph.D., University of Colorado-Boulder
Assistant Professor of Physics and Physics Education-2002
*Recayi Pecen - B.S., M.S., Istanbul Technology University; M.S., University of Colorado; Ph.D., University of Wyoming
Assistant Professor of Industrial Technology - 1998
"Gerri Perreault - B.A., University of Minnesota; M.S., Mankato State University; Ph.D., University of Minnesota
Associate Professor of Educational Leadership, Counseling, and Postsecondary Education - 1997
Director of Leadership Studies - 1991
C. Scott Peters - B.A., Truman State University; M.A., Ph.D., University of Kentucky
Assistant Professor of Political Science-2003
Gerald L. Peterson - A.B., A.M., M.S.L.S., University of Illinois
Professor and Special Collections Librarian and University Archivist - 1974 (2001)
*Jean M. Petsch - B.A., Iowa State University; M.A., University of Northern Iowa; Ph.D., Florida State University
Associate Professor of Art - 1999 (2003)
Calvin D. Phillips-B.S., Oklahoma State University; M.A., Slipper Rock University of Pennsylvania; D.Ed., Indiana University of Pennsylvania
Assistant Professor of Education-2003
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Associate Professor of Physical Education - 1975 (2002)
Miguel F. Pinto - B.M., M.Sci., Juilliard School of Music
Associate Professor of Vocal Coaching - 1992
*Bruce L. Plakke - B.A., M.A., Western Michigan University; Ph.D., Memphis State University
Associate Professor of Audiology - 1978 (1991)
*Antonio Planells - B.A., University of LaPlata, Argentina; M.A. Ph.D., Catholic University of America
Professor of Spanish - 1992
*Aaron Mayer Podolefsky - B.A., California State University-San Jose; M.A., M.A., Ph.D., State University of New York-Stony Brook

Provost and Vice President - 1999
Professor of Anthropology - 1990
"Gayle M. Pohl - B.A., Xavier University; M.A., Ph.D., University of Kentucky
Associate Professor of Public Relations - 1993 (1997)
*Kurt W. Pontasch - B.S., M.S., University of Idaho; Ph.D., Virginia Polytechnic Institute and State University
Associate Professor of Biology - 1989 (1994)
*Daniel J. Power - B.S., M.A., University of Iowa; M.B.A., Ph.D., Unịversity of Wisconsin-Madison
Professor of Management (Mahagement Information Systems) - 1989
Laura Praglin-B.A., Connecticut College; M.A., Yale University; M.A., Ph.D., University of Chicago
Assistant Professor of Social Work-2001
Nilmani Pramanik-B.S., Jadavpur University, India; M.S., Birla Institute of Technology and Science, India; Ph.D., Syracuse University, New York
Assistant Professor of Industrial Technology-2003
*Nancy Price - B.A., Cornell College; M.A., University of Northern Iowa
Professor of English - 1979
*Michael P. Prophet - B.A., Shippensburg University, Pennsylvania; Ph.D., University of California-Riverside
Associate Professor of Mathematics - 1999 (2000)
"David J. Rachor - B.M., B.M.E., Peabody College; M.M., D.M., Indiana University
Professor of Bassoon - 1989 (1999)
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Assistant Professor of Design, Family and Consumer Sciences: Family Services-2003
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Associate Professor of Marketing - 1988 (1996)
P. Nageswara Rao-B.S., Andhrea University, India; B.E., Sri Venka Teswara University, India; M.E., Birla Institute of Technology and Science, India; Ph.D., Indian Institute of Technology, India
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Professor of Finance - 1982 (1990)
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Professor of Special Education - 1979 (1991)
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Professor of Mathematics - 1972 (1982)
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Professor of Marketing - 1991 (2003)
Vera Y. Rayevskaya-B.S., Ural State University, Russia; M.S., University of Nebraska-Lincoln; M.S., Ph.D., Vanderbilt University
Assistant Professor of Mathematics-2003
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*Martha J. Reineke - B.A., Earlham University; M.A., Ph.D., Vanderbilt University
Professor of Religion - 1984 (1999)
*Basil J. Reppas - B.A., University of Athens, Greece; M.A. American University of Beirut, Lebanon; Ph.D., University of Iowa
Professor of Educational Psychology and Foundations - 1961 (1976)
Jason M. Ribando-B.S., Massachusetts Institute of Technology; Ph.D., University of California-San Diego
Assistant Professor of Mathematics-2000
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Professor of Chemistry - 1969 (1979)
Interim Head of the Department of Chemistry-2002
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Instructor of Teaching
Coordinator of Student Teaching - 1991
*Jan C. Robhins - B.A., Pennsylvania State University; M.A., Ph.D., University of Minnesota
Professor of English - 1976
Brian Roberts-B.A., M.A., California State University-Sacramento; Ph.D., Rutgers University
Assistant Professor of History-2001
*Cheryl A. Roberts - B.A., Illinois State University; M.A., Ph.D., University of Illinois, Urbana-Champaign
Associate Professor of English - 1986 (1995)
*James B. Robinson - B.A., Wabash College; M.A., Ph.D., University of Wisconsin-Madison
Associate Professor of Religion - 1971 (1980)
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Tomas Rodriguez - B.A., St. Ambrose College; J.D., University of Iowa Instructor of Management (Law) - 1992
Amy S. RohrBerg - B.A., University of Wisconsin-Green Bay; M.F.A., Michigan State University
Associate Professor of Theatre - 1996 (2002)
Costume Technical Director - 1990
Joan Rohret-B.A., University of Northern Iowa
Instructor of Teaching: Elementary, Price Laboratory School-2001
"Sara Rosell - B.A., University of Havana; B.A., M.A., Ph.D., University of Iowa
Associate Professor of Spanish - 1998 (2002)
Linda Rosulek - B.A., Purdue University; M.A., University of Northern Iowa
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Michael W. Roth - B.S., Ph.D., Colorado State University
Associate Professor of Physics - 2000 (2003)
*Roherta M. Roth - B.S., Iowa State University; M.B.A., University of Minnesota; Ph.D., University of Iowa
Associate Professor of Management (Management Information Systems) — 1980 (1996)
*Konrad Sadkowski - B.A., Brown University; M.A., Ph.D., University of Michigan
Associate Professor of History - 1995 (2001)
Barbara R. Safford - B.S., Miami University; M.A., University of Denver; M.L.A., Johns Hopkins University; D.L.S., Columbia University
Associate Professor of Curriculum and Instruction: School Library Media Studies - 1990 (1998)
*Herbert D. Safford - B.A., University of Vermont; M.A., Yale University; M.S.L.S., D.L.S., Columbia University
Professor and Information Librarian and Bibliographer - 1989
*Md Salim - B.S., Institute of Technology, Bangladesh; M.S., University of Leeds, England; Ph.D., North Carolina State University
Associate Professor of Industrial Technology - 1993 (1999)
*Kent L. Sandstrom - B.A., M.A., Ph.D., University of Minnesota Professor of Sociology — 1992 (2003)
Ben Sehafer-B.A., University of Northern Iowa; M.S., Ph.D., University of Minnesota
Assistant Professor of Computer Science-2001
Carolyn S. Schellhardt-B.S., M.A., Purdue University
Adjunct Instructor of Teaching-2002
*Dennis R. Schmidt - B.A., Michigan State University; M.B.A., University of Wyoming; Ph.D., University of Nebraska-Lincoln; CPA; EA
Professor of Accounting - 1993 (1998)
*Alan W. Schmitz - B.M., M.M., University of New Mexico; Ph.D., Rutgers University
Associate Professor of Music Theory and Composition
Associate Director of Music - 1994
*JoAnn Schnabel - B.F.A., Alfred University; M.F.A., Louisiana State University
Professor of Art - 1990 (2001)
Jean S. Schneider-B.A., Wartburg College; M.A.E., Ed.D., University of Northern Iowa
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*Robert A. Schneider - B.A., M.S.W., Ph.D., University of Maryland
Associate Professor of Social Work - 1999 (2002)
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Adjunct Professor of Religion and Humanities-2001
Kathleen G. Scholl-B.A., M.A., California State University-Chico; Ph.D., University of Minnesota
Assistant Professor of Leisure, Youth and Human Services-2001
Merri L. Schroeder - B.A., University of Northern Iowa; M.A., University of Iowa; Ph.D., University of Las Vegas
Assistant Professor - 1992 (2003)
Associate Director of Teacher Education and Diversity Initiatives-2004
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Associate Professor of Music - 1992 (1998)
*Orlando A. Schwartz - B.A., M.A., California State University-Long Beach; Ph.D., University of Kansas
Professor of Biology - 1980 (1994)
*Ralph S. Scott - B.A., Luther College; M.S.W., University of Wisconsin; Ph.D., University of Chicago
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*Robert D. Seager - B.A., University of California-Santa Barbara; Ph.D., University of California-Davis
Professor of Biology - 1981 (1992)
LeaAnn Shaddox - B.A., University of Northern Iowa; M.A., University of Iowa
Instructor of Physical Education and Leisure Services - 1985 (1997)
*Paul M. Shand - B.S., University of West Indies; M.S., Ph.D., Purdue University
Associate Professor of Physics - 1992 (1997)
*Douglas J. Shaw - B.S., M.S., University of Illinois; Ph.D., University of Michigan
Associate Professor of Mathematics - 1999 (2003)
Marilyn M. Shaw - B.A., M.A., University of Northern Iowa
Instructor of Communication Studies - 1990
Director of Undergraduate Advising-2000
Mary Jane Sheffet - B.A., Occidental College; M.B.A., Ph.D., University of California-Los Angeles
Professor of Marketing
Head of the Department of Marketing - 1997
*Donald E. Shepardson - B.S., Eastern Illinois University; M.A., Ph.D., University of Illinois, Urbana-Champaign
Professor of History - 1970 (1979)

William J. Shepherd - B.S.Ed., M.F.A., Ohio University
Associate Professor of Music - 1976
Aaris A. Sherin-B.F.A., School of the Art Institute of Chicago; M.F.A., Rochester Institute of Technology
Assistant Professor of Art-2003
*Michael J. Shott - B.A., University of Massachusetts; M.A., Ph.D., University of Michigan
Professor of Anthropology — 1989 (2001)
*Paul J. Siddens - B.A., Indiana University-Purdue University at Indianapolis; M.S., Ph.D., Southern Illinois University-Carbondale Associate Professor of Communication Studies - 1988 (1996)
Nikolay N. Silkin-B.S., Ural State University, Russia; M.S., University of Nebraska-Lincoln; M.S., Ph.D., Vanderbilt University
Assistant Professor of Mathematics-2001
*Ira M. Simet - A.B., Princeton University; Ph.D., University of Notre Dame
Associate Professor of Chemistry - 1986 (1992)
Nancy Simet-B.S., St. Mary's Dominican College; M.S., University of Notre Dame
Instructor of Chemistry-1988 (2001)
Diane E. Simmons - B.A., St. Ambrose University; M.S., Western Illinois University
Instructor of Teaching and Coordinator of Student Teaching - 2000
*Patricia L. Sitlington - B.A., St. Mary's College, Notre Dame; M.Ed., University of Hawaii-Honolulu; Ph.D., University of KansasLawrence
Professor of Special Education - 1992 (1996)
*A. Gerald Smith - B.S.B.A., University of Southern Mississippi; M.S., Oklahoma State University; Ph.D., University of Oklahoma; CPA; CIA
Professor of Accounting-1989
*Daryl D. Smith - B.A., University of Iowa; M.S., University of South Dakota; Ph.D., University of Iowa
Professor of Biology and Science Education - 1967 (1978)
Dave Smith-A.A., Waldorf College; B.A., University of Northern lowa; M.A., University of Phoenix

Instructor of Teaching: Price Laboratory School Administration-1996 (2001)
*Gerald F. Smith - B.A., University of Wisconsin-Madison; M.B.A., Temple University; Ph.D., University of Pennsylvania
Professor of Management and Decision Making - 1995 (2003)
Jacquelin J. Smith - B.S., Dana College; M.A., University of Northern lowa
Instructor of Curriculum and Instruction: Elementary Education/ Literacy Education - 1992 (2003)
*John K. Smith - B.S., M.A., Ph.D., University of Wisconsin-Madison
Professor of Educational Psychology and Foundations - 1971 (1985)
Interim Head of Department of Educational Leadership, Counseling, and Postsecondary Education-2004
Interim Head of Department of Educational Psychology and Foundations-2004
Director of Doctoral Programs for College of Education-2004
Lori A. Smith - B.S., Iowa State University; M.A., University of Nothern Iowa
Instructor of Teaching: Physical Education, Price Laboratory School - 1992
*Kent E. Snowden - B.S., M.S.E., Jacksonville State University; M.L.S., University of Alabama
Assistant Professor and Head of Access Services - 1999
*John W. Somervill - B.A., Rhodes College; M.A., University of Mississippi; Ph.D., University of Arkansas
Professor of Psychology - 1975 (1979)
Dean of the Graduate College - 1989

Marius M. Somodi-Diploma, University of Bucharest; M.S., Ph.D., Louisiana State University
Assistant Professor of Mathematics-2001
*Jerome P. Soneson - B.A., North Park College; M.Div., Harvard Divinity School; M.A., Ph.D., Harvard University
Associate Professor of Religion - 1991 (1995)
*Michael S. Spencer - B.S., Southern Illinois University-Carbondale; M.B.A., Southern Illinois University-Edwardsville; M.A., University of Northern Iowa; Ph.D., University of Georgia
Professor of Management - 1992 (2003)
Theresa A. Spradling-B.S., Emporia State University; M.S., University of North Texas-Denton; Ph.D., Louisiana State University
Assistant Professor of Biology-2000
Aaron J. Spurr - B.A., M.A., University of Northern Iowa
Instructor of Teaching: Science, Price Laboratory School - 1998
Marybeth Stalp-B.A., Regis University; M.A., Southern Illinois University-Carbondale; Ph.D., The University of Georgia
Assistant Professor of Sociology-2003
*Thomas R. Stancliffe - B.S., Illinois State University; M.F.A., Northern Illinois University
Professor of Art — 1988 (2000)
*Adrienne M. Stanley - B.S., M.A., Ph.D., University of Kansas
Associate Professor of Mathematics - 1999 (2003)
Amy Staples-B.A., Augustana College, M.Ed., Ph.D., University of North Carolina, Chapel Hill
Assistant Professor of Special Education-2002
Robert P. Stavnes-B.S., University of Iowa; M.A., Central Michigan University
Lieutenant Colonel and Head of the Department of Military Science - 2002
*Jeannie L. Steele - B.A., University of North Carolina-Charlotte; M.Ed., James Madison University; Ph.D., University of Virginia

Professor of Curriculum and Instruction: Literacy Education - 1987 (1998)

Co-Director of Office of Education for Democracy - 1998
*Gregory P. Stefanich - B.S., University of Minnesota-Duluth; M.S., University of Minnesota-Minneapolis, Ed.D., University of Montana
Professor of Curriculum and Instruction: Elementary Education — 1976 (1981)
Interim Head of the Department of Curriculum and Instruction-2004
James L. Stichter-B.A., Augustana College; M.A.E., University of Northern Iowa
Instructor of Teaching: Counseling, Price Laboratory School-2000
Mary K. Stichter-B.A., M.A.E., University of Northern Iowa
Instructor of Teaching: Elementary Education, Price Laboratory School-1990
Instructor of Curriculum and Instruction: Elementary Education-2003
"William M. Stigliani - B.A., University of Connecticut; M.A., Ph.D., Princeton University
Professor of Chemistry
Director of Central Energy and Environmental Education-1994
Sarah C. Stille-B.A., University of Northern Iowa
Instructor of Leisure, Youth and Human Services and Physical Education-2003
"Jerry D. Stockdale - B.S., M.S., Ph.D., Iowa State University
Professor of Sociology - 1973 (1980)
-Jody M. Stone - B.S., M.A.T., University of Iowa; Ph.D., Southern Illinois University
Associate Professor of Teaching: Science Education, Price Laboratory School-1978(1988)
*Marilyn D. Story - B.A., Ohio Wesleyan University; M.A., University of Michigan; Ph.D., Michigan State University
Professor of Design, Family and Consumer Sciences: Family Services — 1968 (1983)
"Laura Hoistad Strauss - B.A., St. Olaf College; M.S., Ph.D., University of Michigan
Assistant Professor of Chemistry - 1998
*Mitchell D. Strauss - B.A., University of North Carolina; B.S., North Carolina State University; M.S., Institute of Textile TechnologyCharlottesville; Ed.D., University of Virginia
Associate Professor of Design, Family and Consumer Sciences: Textile and Apparel - 1999
*Tim R. Strauss - B.S., University of Wisconsin-Madison; M.S., University of London; Ph.D., University of Washington
Associate Professor of Geography - 1999 (2003)
*Christine (Crit) S. Streed - B.A., University of Northern Iowa; M.A., M.F.A., University of Iowa

Professor of Art - 1979 (1997)
"L. Allison Stringer - B.A., College of William and Mary; M.A., Ph.D., University of Minnesota
Associate Professor of Leisure, Youth and Human Services - 1998 (2004)

Clare A. Struck - B.A., M.A., University of Northern Iowa
Instructor of Teaching: Counseling, Price Laboratory School - 1983
"Philip W. Suckling - B.Sc., M.Sc., McMaster University; Ph.D., University of British Columbia
Professor of Geography
Head of the Department of Geography - 1991
Ramanathan Sugumaran-B.Sc., Madras University, India; M.Sc., Annamalai University, India; Ph.D., Maharaja Sayajirao University, India; Ph.D., University of Edinburgh
Assistant Professor of Geography-2002
Joshua E. Susskind-B.A., Brandeis University; M.A., Ph.D., University of California-Santa Barbara
Assistant Professor of Psychology-2000
"Jesse G. Swan - B.A., University of Texas-San Antonio; M.A., Ph.D., Arizona State University
Associate Professor of English — 1998 (2002)
*Annette C. Swann - B.A., Murray State University; M.A., Columbia University; Ed.D., Indiana University
Associate Professor of Teaching: Art - 1983 (1992)
Michelle H. Swanson - B.M., M.M., University of Northern Iowa
Instructor of Teaching: Music - 1998
*John W. Swope - B.A., Virginia Polytechnic Institute and State University; M.S., Radford College; Ed.D., Virginia Polytechnic Institute and State University
Associate Professor of English - 1987 (1994)
*Stephen W. Taft - B.S.E., Central Missouri State University; M.A, Southwest Missouri State University; Ph.D., Texas Tech University
Associate Professor of Theatre and Dance
Acting Head of the Department of Art - 2004
Jolene K. Tagtow - B.A., M.A., University of Northern Iowa
Instructor of Teaching: Language Arts, Theatre - 2000
David R. Tallakson - B.A., Arizona State University; M.A., University of Iowa
Instructor of Teaching: Educational Media - 1998
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Instructor of Teaching: Elementary Education, Price Laboratory School - 1986

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Jeffrey W. Tamplin-A.B., Augustana College; M.S., Ph.D., Louisiana State University
Assistant Professor of Biology-2001
Rowena N. Tan - B.A., Wooster College; M.Eq., Ph.D., University of Minnesota
Assistant Professor of Psychology - 1994
*Darryl Taylor - B.M., M.M., University of Southern California; D.M.A., University of Michigan-Ann Arbor

Associate Professor of Voice - 1996 (2001)
*Laura A. Terlip - B.S., M.A., Pittsburgh State University; M.S., London School of Economics; Ph.D., University of Oklahoma
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Professor of Finance - 1990
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Professor of Physical Education - 1975 (1998)
Director of National Program for Playground Safety-1995
*Carl L. Thurman - B.S., University of Houston; M.S., University of West Florida; Ph.D., University of Minnesota
Associate Professor of Biology - 1992 (1998)
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M. Jane Toerner - B.S., University of Cincinnati; M.A. University of Northern Iowa
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Associate Professor of English - 1996 (2002)
Editor, North American Review - 2000
*Karen K. Tracey - B.A., M.A., Kansas State University; Ph.D., University of Illinois, Urbana-Champaign
Associate Professor of English - 1994 (2000)
Julia K. Trahan-B.M., M.M., Temple University; D.M.A., The University of Georgia
Assistant Professor of Viola and Theory-2000
*Jill M. Trainer - B.A., University of California-Berkley; M.S., Ph.D., . University of Michigan
Professor of Biology - 1989 (2002)
Interim Associate Dean of the College of Natural Sciences-2003
*Rick C. Traw - B.A., Ottawa University; M.S. Emporia State University; Ed.D., University of South Dakota
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Director, Iowa Office for Educator Development
*Thomas J. Tritle - B.M., Baldwin Wallace College; Teaching Certificate, South Dakota State University; M.M., New England Conservatory; D.M.A., University of Iowa
Associate Professor of French Horn - 1980 (1991)
Vicki Truka-B.A., University of Northern Iowa
Instructor of Teaching: Art, Price Laboratory School-2003

Kerri Turk-B.A., Carroll College; M.S., Ph.D., Texas A \& M University Assistant Professor of Educational Psychology and Foundations-2003
Paul D. Turman-B.S., M.A., South Dakota State University; Ph.D., University of Nebraska
Assistant Professor of Communication Studies-2000 (2001)
Jill M. Uhlenherg - B.A., M.A.E., University of Northern Iowa; Ph.D., University of Iowa
Associate Professor of Teaching: Early Childhood Education, Price Laboratory School - 2000
Coordinator of Child Development Center-1989
*Leomard M. Upham - B.A., Luther College; M.A., University of Iowa; Ed.D., University of Northern Iowa
Associate Professor of Teaching: Music - 1989 (2001)
*Richard J. Utz - B.A., M.A., Ph.D., University of Regensburg, Germany
Professor of English — 1991 (2001)
*Bulent Uyar - B.A., Robert College, Instanbul; M.A., Ph.D., University of Pittsburgh
Associate Professor of Economics - 1991
"Dhirendra K. Vajpeyi - Siddhantalankar; L.L.B., M.A., M.A., Lucknow University; M.A., Ph.D., Michigan State University
Professor of Political Science - 1969 (1979)
*John F. Vallentine - B.M.E., Southeast Missouri State University; M.M., University of Northern Iowa; Ph.D., University of Kentucky

Associate Professor of Bands - 1991 (1995)
Director of the School of Music - 1999
Betty van der Smissen-A.B., J.D., University of Kansas; M.S., Re.D., Indiana University
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Richard M. Vanderwall - B.F.A., Drake University; M.A., University of Southern Mississippi
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*Shahram Varzavand - B.T., M.A., University of Northern lowa; Ph.D., Iowa State University
Professor of Industrial Technology - 1987 (2001)
*Flavis T. Vernescu - B.A., University of Bucharest; M.A., Ph.D., University of Illinois-Urbana
Associate Professor of French - 1991 (1997)
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Kimberly Vess Darst-B.S., Ball State University; M.A., E.D., University of Cincinnati
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Paul J. Waack - B.S., University of Dubuque; M.A., University of Iowa
Instructor of Physical Education - 1982
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Bridgette Wagener-B.A., University of Northern Iowa
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Sandra Walden-B.A., Coe College; M.M., University of Minnesota
Instructor of Opera, Musical Theater-2003
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Assistant Professor of Physical Education-2003
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Professor of History - 1975 (1983)
Associate Dean for Faculty Scholarship, Graduate College - 1989
*Julia E. Wallace - B.S., State University of New York-Oswego; M.A., State University of New York-Binghamton; M.S., University of Iowa; Ph.D., State University of New York-Binghamton

- Professor of Psychology — 1978 (1989)

Dean of the College of Social and Behavioral Sciences - 2000
*V. Eugene Wallingford - B.A., Ball State University; M.S., Ph.D., Michigan State University
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[^0]:    Computer Science
    Criminology
    Dance
    Earth Science
    Economics
    Electrical and Electronics Technology (EET)
    English
    Environmental Studies
    Ethics
    Family Studies
    Financial Services
    Financial ServicesBBusiness
    French
    General Business Concepts
    Geography

[^1]:    Required:*
    Biology core:
    Introductory track: 840:051; 840:052; 840:140** ....... 12 hours
    Group 1: 840:151; 840:152............................................... 8 hours
    
    

    - Biology: 840:130; 840:153 ............................................ 7 hours

    Cognate courses:
    Chemistry: 860:044 and 860:048***; 860:120;
    860:121 and 860:123; 860:154 20 hours
    Physics: 880:054 ....................................................................... 4 hours
    Electives: selected from the following list
    
    Computer Science: 810:030 or 810:035.
    Biology": 100-level or above (excluding 840:101)
    Chemistry: 860:132; 860:155; 860:156
    Physics; 880:056.
    Research: 840:190 or 840:195
    62 hours
    *At least 7-8 hours of biology credit must be 100 g -level.
    **840:140 is not required as a prerequisite for 100 -level courses.
    ***Students with excellent preparation in chemistry may substitute 860:070 plus 3 additional credit hours of biology electives for 860:044 and 860:048. \#Not more than four (4) semester hours of credit from 840:179, 840:185, $840: 190$ and $840: 198$ will be accepted for biology elective credit.

[^2]:    Required:
    Mathematics: 800:060, 800:061 ............................................. 8 hours
    Biology: 840:051; 840:052 ... .8 hours
    Chemistry: 860:044 and 860:048, or 860:070; $860: 110$; 860:120; 860:121; 860:123; 860:132; 860:137; 860:140; 860:141; 860:143 (2 hrs.); 860:154; 860:155; 860:156 41-44 hours Physics: 880:054; 880:056 8 hours
    Additional advanced study, to include at least 2 hours of $860: 180$ Undergraduate Research and at least 3 hours in a 100-level biology course $\qquad$ 73 hours

[^3]:    Required:
    Communication: 48C:001; 48C:004; 48C:011; 48C:024;
    48C:074; 48C:187
    .18 hours
    Option A or B.............................................................................. 10-12 hours
    Option A: Communication ( 10 hours)
    Communication: one hour from 48C:091/
    48C:191 or 48C:093/48C:193; 48C:015; 48C:071.
    Theatre: 490:101 or 490:106.
    Option B: Theatre ( 12 hours)
    Theatre: 490:001; 490:015; 490:034; (these three
    classes must be taken before 490:161); 490:161
    28-30 hours

[^4]:    "Students with excellent preparation in chemistry may substitute 860: 070 for 860:044 and 860:048.

[^5]:    Required:
    Design, Family and Consumer Sciences: 31T:013; 31T:014; 31T:020 9 hours
    
    Design, Family and Consumer Sciences: 31T:011; 31T:012;
    31T:015; 31T:114; 31T:115; 31T:116; 31T:119;
    31T:121; 31T:122; 31T:123; 31T:124; 31T:184.

[^6]:    Required:
    Mathematics: 800:046 or 800:060 ........................................... 4 hours
    Chemistry: 860:044 or 860:061 ............................................ 4 hours
    Earth Science: $870: 010^{*} ; 870: 021 ; 870: 031 ; 870: 035$........... 15 hours
    Biology: 840:051; 840:052; 840:168.................................... 11 hours
    Physics: 880:054 ................................................................... 4 hours
    Biology Natural History Interpretation Minor (see page 71)

    18-20 hours
    Electives in earth science: 100 -level ${ }^{* *}$
    11 hours
    67-69 hours
    *870:010 must be taken for four semester hours of credit.
    **Electives must include one course from each of astronomy, geology and meteorology.

    ## Earth Science Major-Teaching

    Required:
    Science and Science Education: 820:190; 820:193; 820:196. 8 hours
    Chemistry: 860:044 and 860:048, or 860:070 .5-8 hours
    Earth Science: 870:010*; 870:021; 870:022; 870:031;
    870:035; 870:121
    20 hours
    Physics: 880:054; 880:056 .................................................... 8 hours
    Electives in earth science: 100 -level courses (excluding 870:186, 870:189, 870:191, 870:195, and 870:198)........ . 6 hours 47-50 hours
    *870:010 must be taken for four semester hours of credit.

[^7]:    Required:
    Humanities: two of the following - 680:122; 680:124; $680: 125$.... 6 hours 680:198 (to be supervised by the Asian Studies Committee and combining Asian Studies and the student's major discipline)

    3 hours
    Two additional courses to be chosen from the list of Asian Studies Major electives

    6 hours
    15 hours

[^8]:    Required:
    English Language and Literature: 620:128*........................... 3 hours
    
    
    History: 960:146 or 960:161 .................................................... 3 hours
    One of the following Psychology: 400:060. Humanities: 680:160.
    Electives from the following list of courses chosen in consultation
    with the Director of the Women's Studies Program for a
    minimum of.
    2 hours
    22 hours
    *Additional prerequisites may be required.
    List of electives:
    Educational Psychology: 200:140; 200:188.
    Design, Family and Consumer Sciences: 31F:010; 31F:020; 31F:057 31F:150; 31F:157; 31T:114.
    Psychology: 400:173.
    Health Promotion and Education: 410:020; 410:128; 410:162.
    Leisure, Youth and Human Services: 430:030.
    Social Work: 450:041; 450:163; 450:173; 450:194.
    Communication: 48C:108 or 48C:110; 48C:113; 48C:122; 48C:123; 48C:146; 48C:151; 48C:153; 48C:160; 48C:189.
    Theatre: 490:160.
    Art: 600:060; 600:180.
    English Language and Literature: 620:121; 620:225.
    Religion: 640:024; 640:162; 640:168.
    Philosophy: 650:152.
    Humanities: 680:123; 680:128; 680:130; 680:156.

[^9]:    Required:
    Humanities: 680:010; 680:110; 680:188................................. 7 hours
    Electives 6 hours
    two courses from the list approved for the Leadership
    Studies minor (see pages 103-104) for a total of 6 hours.
    13 hours

[^10]:    Required:
    Elementary, Early Childhood, and Middle Level Education: 210:242.......................................................
    Science and Science Education: 820:130; 820:200;
    $820: 213 ; 820: 290 ; 820: 294$............................................ 10 hours
    Thesis or non-thesis option ......................................... 22 or 24 hours
    35 or 37 hours
    $\qquad$ 3 hours

[^11]:    Required core for all five emphases. 15 hour
    Industrial Technology: 330:200; 330:270; 330:282; 330:292; 330:378; and 150:119 or 680:110
    Emphasis (choose from one of following emphases)..... 16-18 hourd thesis option ( 16 hrs.) non-thesis option ( 18 hrs .)

    31-33 hour

[^12]:    Required:
    Science and Science Education: 820:213; 820:290; 820:294... 6 hours
    Science and Science Education: 820:200 .............................. 2 hours
    Other courses selected from biology, chemistry, earth science, and physics 4 hours
    
    Measurement and Research: 250:180; 250:205.
    (Other courses may be selected from the electives below which are marked by an asterisk*.)
    Research: 820-299. 6 hours
    Internship:
    Teaching: 280:250 or
    Science and Science Education: 820:297 3 hours

[^13]:    * Regular graduate faculty member.

